

WASHINGTON AGRICULTURAL STATISTICS

1988-89 ANNUAL

PUBLISHED: OCTOBER 1989

Prepared By:
 WASHINGTON AGRICULTURAL STATISTICS SERVICE
 417 WEST 4TH AVENUE
 OLYMPIA, WASHINGTON 98501
 (206) 586-8919

DOUGLAS A. HASSLEN, STATE STATISTICIAN
 JERRY M^cCALL, DEPUTY STATE STATISTICIAN

SUPPORT & ADMINISTRATION
 GAIL SPAIN
 JOAN WORKMAN

SURVEY
GROUP

JOE ROSS, LDR.
 DAVID LOSH
 DAVE BAU
 CHERYL ITO
 DALE SMITH

ESTIMATES
FRUIT & LIVESTOCK

HARRY NISHIMOTO, LDR.
 FRANK HAMMEL, JR.
 LEEONA YEE

ESTIMATES
FIELD CROPS & VEGETABLES

KIM RITCHIE, LDR.
 LINDA LARSEN
 MARY ERICKSON
 GEORGE BURDEN, JR.

DATA
PROCESSING

LEO ZEGGERT, LDR.
 RANDY SANFORD
 RUBY VAN DE CAR

Issued Cooperatively By:

STATE OF WASHINGTON
 DEPARTMENT OF AGRICULTURE

C. ALAN PETTIBONE, DIRECTOR
 ART SCHEUNEMANN, ASST. DIRECTOR
 MARKET DEVELOPMENT

UNITED STATES
 DEPARTMENT OF AGRICULTURE
 NATIONAL AGRICULTURAL
 STATISTICS SERVICE

CHARLES CAUDILL, ADMINISTRATOR
 FREDERIC VOGEL, DIRECTOR, STATE OFFICES



STATE OF WASHINGTON
OFFICE OF THE GOVERNOR

OLYMPIA
98504-0413

BOOTH GARDNER
GOVERNOR



October 1989

To the citizens of Washington state:

Once again I take great pleasure in joining with the Washington State Department of Agriculture and the Washington Agricultural Statistics Service to present to you this factual view of one of Washington's most important industries -- agriculture.

In this year of our state's 100th birthday, we have had many occasions to look back to our heritage, our roots. Since our territorial years, agriculture has been an integral part of the development of this state. Agriculture has been and will continue to be a key factor in the state's economy.

Our economy depends on a strong and viable agricultural sector. The current, accurate information on agriculture contained in this bulletin, along with the other reports issued throughout the year, are critical to me and others who must make decisions that shape the future of our great state.

My thanks to all who voluntarily provided information to make this publication possible.

Sincerely,

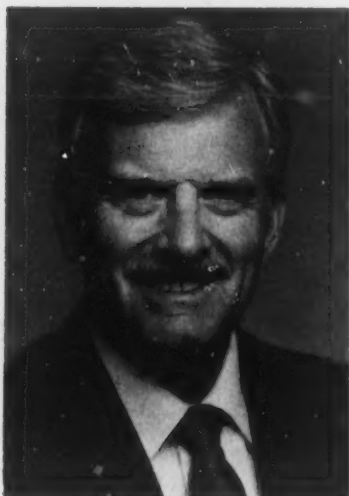
Booth Gardner
Governor

C. ALAN PETTIBONE
Director



STATE OF WASHINGTON
DEPARTMENT OF AGRICULTURE

406 General Administration Bldg., AX-41 • Olympia, Washington 98504-0641 • (206) 753-5063



We have very definitely just come through an interesting year. The winter brought some very unusual storms into our state that destroyed 800,000 acres of winter wheat and caused serious damage to other crops and livestock. There have been a multitude of wide-ranging issues that have tested our fortitude. There has been a heightened awareness of the use of pesticides in agriculture, relative to many different commodities. Concerns about food safety and the effects of agricultural chemicals on the environment and human health have been front page items.

The state's agricultural industry has had to respond to these issues as has this department. Together we've worked to find answers and solutions. Responses have included changes in the state's pesticide laws, the development of the state's organic producer certification program, one of the first in the nation, and, most recently, a special testing program to ensure compliance with state rules requiring growers to obtain a permit before using Alar on food crops.

These events bring clearly to mind the fact that agriculture is constantly changing and that we must be ready to meet whatever new challenge comes our way. As we celebrate our state's Centennial and look back over the past 100 years, we see that we have adapted to numerous challenges and grown tremendously during that time.

That change and growth has been highlighted this year in a special way. As a part of the state's Centennial celebration, the department has recognized 391 farms located throughout the state that have been in the same family for at least 100 years. It has been a pleasure to recognize these farms and the importance of agriculture to Washington State's history and economy during this Centennial year.

Washington Agricultural Statistics is our annual summary publication and part of an extensive schedule of reports issued by the Washington Agricultural Statistics Service. This statistical program is a joint effort of the Washington State Department of Agriculture and the National Agricultural Statistics Service. Through this cooperative arrangement, we are able to provide a comprehensive program of agricultural data without duplication of resources.

The data for this publication were supplied voluntarily by thousands of state farmers, ranchers, agribusinessmen and others. Each of those individuals has my sincere thanks for the important role they played in making this publication and other agricultural reports possible.

Sincerely,

C. Alan Pettibone
Director

The cover of this year's bulletin depicts one of Washington's leading industries - cattle. Since the early days of the state, cattle have been a key agricultural commodity.

Special thanks are given to the Washington Farmer-Stockman staff for their contribution in providing the cover photo and color separation.

TABLE OF CONTENTS

GENERAL

Value of Production	6
Rank of Principal Commodities	7
Washington's Rank in Agriculture	8
Number of Farms and Land in Farms	9
Agricultural Statistics Districts	9
Record Highs and Lows	10-11
Season Review and Weather	12-17
Prices Received	18-19
Prices Paid	20-22
Index of Prices	23
Farm Economics	24-25
Farm Labor	26
Floriculture	27-29
Exports	30-33
Usual Planting and Harvesting Dates	34
Estimates Schedule	132

FIELD CROPS

General Information	35
Acreage, Production, Price and Value	36-37
All Wheat	38-39
Winter Wheat	40
Spring Wheat	40
Wheat Varieties	41-45
Winter Wheat 1987-88	46-47
Spring Wheat 1987-88	48-49
Barley	50
Barley Varieties	51-53
Barley 1987-88	54-55
Oats	56-57
Corn, For Grain and Silage	58-60
Hay	61-63
Dry Beans	64-65
Potatoes	66-69
Mint	70-71
Hops	72-73
Grass Seeds	74-76

FRUITS

General Information	77
Production, Price, and Value	78-79
Production by Fruit Districts	80
Harvesting Costs	81
Apples	82

Refrigerated Space	83
Grapes	84-85
Apricots	86
Peaches	86
Sweet Cherries	87
Bartlett and Other Pears	88
Prunes	89
Filberts	89

VEGETABLES

Acreage, Production, and Value	90-91
Asparagus	92
Carrots	93
Sweet Corn	94
Green Peas, Processing	95
Dry Onions	96
Lettuce	97
Mushrooms	98

BERRIES

Acreage, Production, and Value	99
Black Raspberries	100
Strawberries	101
Red Raspberries	102
Blueberries	103
Cranberries	104
Cultivated Blackberries	104

LIVESTOCK

General Information	105
Value of Production 1984-88	106
Inventory and Value	107
Cattle and Calves	108-111
Cattle on Feed	112-113
Milk Production, Utilization, and Value	114-115
Dairy Products	116-117
Hogs	118-119
Sheep and Lambs	120-121
Poultry	122-123
Mink	124
Bees and Honey	125
Livestock County Estimates	126-127
Aquaculture	128-131

VALUE OF PRODUCTION

The value of agricultural production in Washington reached \$3.67 billion for 1988, a record high. The previous record was set in 1984 at \$3.28 billion. The 1988 value of production was 24 percent more than 1987, at \$2.96 billion.

Agricultural commodities are grouped into categories for comparison purposes, and all categories showed an increase during 1988 ranging from 4 percent for berries to 37 percent for field crops.

Wheat regained the number 1 commodity slot and contributed nearly \$530 million in 1988, compared with \$322 million in 1987. Production was up slightly for wheat, but the big factor was the price at \$4.25 per bushel compared with \$2.82 a year earlier.

Milk slipped to the number 2 ranking position with \$496 million in production and posted a modest 4 percent increase from 1987. Apples also slipped a position and were ranked the third most valuable crop in 1988. The apple crop was the second largest of record and the 1988 prices were much stronger than 1987.

Cattle and calves value of production was \$401 million in 1988 and was the result of both higher production and prices. Potatoes held the fifth ranked position with \$272 million. Potato production was down slightly for 1988, but prices were offsettingly higher than a year earlier.

Comparisons of the top 40 commodities illustrate the diversity of agriculture in Washington. The table shows only the value of production which is a function of both supply and price. The data user should refer to the detail section in this bulletin to evaluate these factors.

Value of Production, Washington

Year	Field Crops	Fruit & Nuts	Vege- Tables	Seed Crops 1/	Berry Crops	Total Crops	Specialty Products 2/	Livestock & Products	State Total
1,000 Dollars									
1974	1,068,376	239,328	83,711	31,021	12,951	1,435,387	122,699	447,605	2,005,691
1975	1,077,227	208,846	93,933	26,045	12,747	1,418,798	120,356	454,375	1,993,529
1976	920,547	283,467	92,295	30,320	14,988	1,341,617	108,776	483,460	1,933,853
1977	753,390	361,917	86,718	27,073	18,176	1,247,274	149,987	487,483	1,884,744
1978	955,076	417,810	103,679	35,325	20,840	1,532,730	141,595	602,144	2,276,469
1979	1,012,707	457,566	127,098	31,969	21,905	1,651,245	186,000	765,929	2,603,174
1980	1,432,130	369,823	119,527	41,795	17,263	1,980,538	160,400	810,984	2,951,922
1981	1,411,703	438,382	138,790	31,975	22,279	2,043,129	173,192	881,843	3,098,164
1982	1,356,088	388,951	144,915	N/A	28,788	1,918,742	170,089	892,485	2,981,316
1983	1,484,640	502,141	138,770	N/A	26,750	2,152,301	179,020	908,434	3,239,755
1984	1,508,748	461,495	149,682	N/A	21,125	2,141,050	195,398	939,523	3,275,971
1985	1,229,633	490,021	155,976	25,195	27,369	1,928,224	215,693	995,151	3,029,068
1986	1,054,581	683,039	162,274	26,151	24,077	1,950,122	226,690	886,314	3,063,126
1987	991,901	555,259	173,254	35,618	31,106	1,787,138	274,326	923,891	2,958,355
1988	1,374,071	711,670	197,016	40,503	32,138	2,355,398	297,522	1,029,845	3,682,765

1/ Seed crops not available for 1982-1984 due to program modifications.

2/ Includes forest products, nursery products, greenhouse products, other horticultural products, and mushrooms.

Rank of Principal Commodities, Washington

Commodity	Rank			Value of Production			% Change 1988 vs 1987
	1986	1987	1988	1986	1987	1988	
				1,000 Dollars			
Wheat	4	4	1	293,294	322,284	529,635	64
Milk	2	1	2	468,980	474,991	495,851	4
Apples	1	2	3	488,400	348,000	493,650	42
Cattle and Calves	3	3	4	294,337	325,594	401,461	23
Potatoes	5	5	5	266,385	244,404	284,625	16
Hay	6	6	6	172,440	147,041	222,391	51
Nursery & Greenhouse Products	7	7	7	94,000	125,000	130,000	4
All Pears	8	9	8	75,832	67,717	90,208	33
Barley	9	10	9	75,150	66,338	85,064	28
Sweet Cherries	10	8	10	59,437	68,332	60,918	-11
Eggs	12	13	11	55,577	48,211	55,402	15
Hops	11	12	12	56,439	49,365	54,061	10
Asparagus	13	14	13	40,612	40,257	47,198	17
Grapes	14	11	14	37,120	55,356	44,601	-19
Aquaculture 1/	-	20	15	22,984	24,229	41,778	72
Chickens & Broilers	16	15	16	36,049	36,045	41,661	16
Corn, Grain	15	17	17	36,720	29,240	40,800	40
Mint Oil	17	19	18	27,991	26,461	34,636	31
Sweet Corn, All	20	16	19	24,531	30,867	33,441	8
Onions	21	18	20	23,770	27,342	26,776	-2
Corn, Silage	18	21	21	27,000	22,000	24,000	9
Green Peas, Processing	22	22	22	20,431	21,714	21,361	-2
Dry Edible Beans	26	28	23	11,926	11,488	21,221	85
Dry Edible Peas	23	24	24	18,054	16,112	20,352	26
Kentucky Bluegrass Seed	24	23	25	13,407	19,404	20,064	3
Carrots	25	25	26	12,270	13,021	17,412	34
Alfalfa Seed	27	30	27	10,537	11,172	16,770	50
Red Raspberries	28	27	28	10,509	12,109	13,482	11
Lentils	19	26	29	26,637	12,804	11,305	-12
Peaches	29	34	30	9,105	7,076	9,660	37
Mink	30	29	31	8,085	11,325	9,219	-19
Hogs & Pigs	31	31	32	7,227	9,268	8,717	-6
Mushrooms	33	33	33	6,263	7,576	7,327	-3
Strawberries	32	32	34	6,500	8,180	6,838	-16
Cranberries 2/	34	35	35	4,530	5,850	5,940	2
Wrinkled Seed Peas	39	40	36	2,498	3,180	5,275	66
Oats	-	39	37	2,360	3,234	5,206	61
Lettuce	38	38	38	3,175	3,576	5,141	44
Blueberries	-	36	39	2,022	4,312	4,932	14
Sheep, Lambs & Wool	35	37	40	3,696	3,858	4,380	14

1/ The Department of Fisheries State of Washington annually calculates the value of Aquaculture production. The 1988 preliminary value is placed at \$41,777,791. Refer to pages 128-131 in this publication for a breakdown by specie.

- Not Available.

Washington's Rank in the Nation's Agriculture

Item	Rank Among States		Washington Production 1988	Unit	Washington Percent of U. S.	Leading State
	1988	1987				
1,000 Units						
Crops						
Hops	1	1	39,751	Lbs.	72.7	Washington
Spearmint Oil	1	1	1,261	Lbs.	72.3	Washington
Peppermint Oil	2	2	1,419	Lbs.	26.5	Oregon
Potatoes, Fall	2	2	63,250	Cwt.	20.6	Idaho
Barley	3	5	34,720	Bu.	12.0	Idaho
Wheat, All	3	5	124,620	Bu.	6.9	Kansas
Dry Edible Beans	7	8	742	Cwt.	3.9	Nebraska
All Hay	19	22	2,833	Tons	2.2	California
Fruit						
Apples, All	1	1	1,950.0	Tons	42.6	Washington
Pears, All	1	2	310.0	Tons	36.0	Washington
Sweet Cherries	1	1	62.0	Tons	33.3	Washington
Apricots	2	2	6.1	Tons	6.0	California
Grapes	2	2	182.0	Tons	3.0	California
Prunes and Plums	2	4	13.5	Tons	2.6	Oregon
Peaches	6	7	25.0	Tons	1.9	California
Vegetables						
Carrots, Processing	1	1	111.7	Tons	31.8	Washington
Green Peas, Processing	1	3	90.2	Tons	28.8	Washington
Asparagus	2	2	896.0	Cwt.	36.9	California
Sweet Corn, Processing	3	3	430.5	Tons	17.9	Wisconsin
Dry Onions, All Summer	5	6	3,160	Cwt.	7.6	California
Berries						
Red Raspberries	1	1	25,200	Lbs.	57.1	Washington
Strawberries, All	4	4	221	Cwt.	2.0	California
Cranberries	5	5	135	Bbls.	3.4	Massachusetts
Livestock						
Mink	6	5	244	Pelts	5.5	Wisconsin
Milk Production	9	9	3,966,000	Lbs.	2.7	Wisconsin
Milk Cows 1/	11	12	216	Head	2.1	Wisconsin
Eggs Produced	16	17	1,327,000	Eggs	1.9	California
Farm Chickens 2/	18	19	6,085	Head	1.7	California
Bees and Honey	19	14	3,055	Lbs.	1.4	Florida
Broilers Produced	19	18	28,200	Head	.6	Arkansas
Sheep and Lambs 1/	29	28	74	Head	.7	Texas
All Cattle and Calves 1/	30	30	1,300	Head	1.3	Texas
Hogs and Pigs 2/	35	35	53	Head	.1	Iowa

1/ January 1, 1989/1988 Inventory.

2/ December 1, 1988/1987 Inventory.

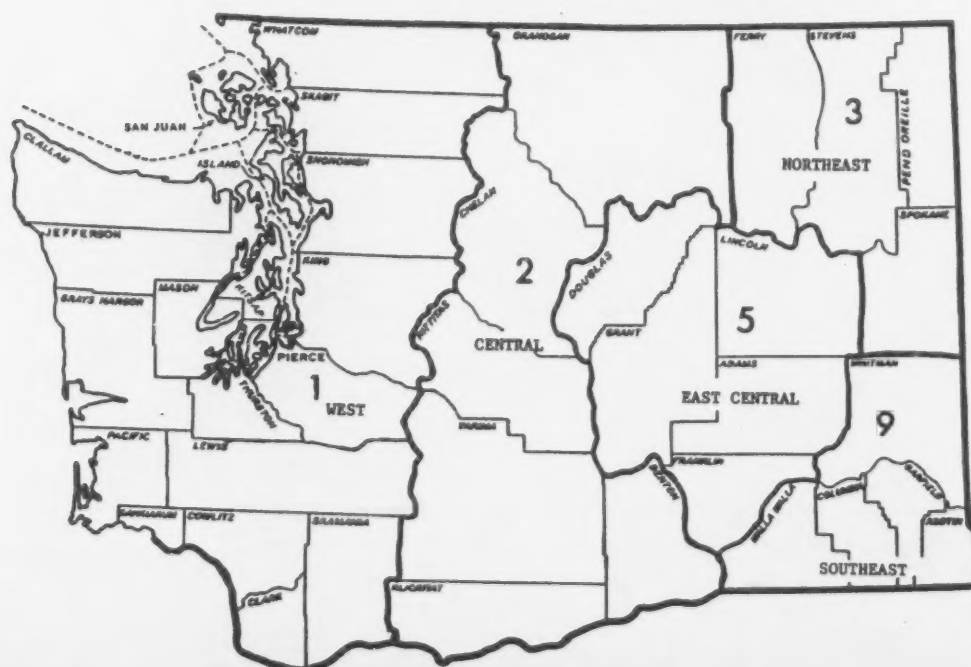
Number of Farms and Land in Farms 1/

Year	Washington			United States		
	No. of Farms	Land in Farms, Acres	Avg. Size of Farm	No. of Farms	Land in Farms, Acres	Avg. Size of Farm
	1,000	1,000	Acres	1,000	1,000	Acres
1975	34.0	16,100	474	2,521	1,059,420	420
1976	34.0	16,100	474	2,497	1,054,075	422
1977	34.0	16,100	474	2,456	1,047,785	427
1978	36.0	16,100	447	2,436	1,044,790	429
1979	37.0	16,300	441	2,432	1,042,015	428
1980	38.0	16,300	429	2,433	1,038,885	427
1981	39.5	16,400	415	2,434	1,034,190	425
1982	39.0	16,400	421	2,401	1,027,795	428
1983	38.0	16,300	429	2,370	1,024,195	432
1984	38.0	16,100	424	2,328	1,019,378	438
1985	38.0	16,100	424	2,275	1,014,383	446
1986	38.0	16,000	421	2,212	1,007,643	456
1987	38.0	16,000	421	2,212	998,923	461
1988	38.0	16,000	421	2,197	994,543	463
1989 2/	38.0	16,000	421	2,172	991,473	456

1/ Starting with 1975, the figures are based on the "new definition" which is a place with annual sales of agricultural products of \$1,000 or more. Prior to this definition "a farm" included places of 10 or more acres that had annual sales of agricultural products of \$50 or more and places of less than ten acres that had annual sales of \$250 or more.

2/ Preliminary.

Agricultural Statistics Districts (ASD)



Record Highs and Lows in Washington Agriculture

Field Crops, Vegetables & Berries	Year Estimates Started	Record High or Low	Acreage		Yield			Production	
			Harvested	Year	Unit	Per Acre	Year	Total	Year
			1,000					1,000	
All Wheat	1879	High Low	3,200 82	1976 1879	Bu. Bu.	64.2 12.5	1983 1918	172,570 1,935	1983 1879
Barley	1882	High Low	1,180 24	1985 1882	Bu. Bu.	75 13	1980 1918	63,700 652	1984 1882
Oats	1882	High Low	270 30	1909 1/	Bu. Bu.	68 31	1984 1889	13,230 1,505	1909 1977
Corn, Grain	1919	High Low	160 6	1982 1948	Bu. Bu.	170.0 26.5	2/ 1934	24,000 318	1982 1934
Corn, Silage	1919	High Low	67 7	1973 3/	Tons Tons	25.0 6.9	10/ 1919	1,340 70	1973 1920
Dry Edible Beans 4/	1929	High Low	73 1	1958 5/	Cwt. Cwt.	22.2 2.4	1983 1929	1,402 9	1958 1930
Dry Edible Peas 6/	1929	High Low	390 42	1943 1929	Cwt. Cwt.	25.5 7.1	1980 1949	2,812 330	1962 1929
Lentils	1952	High Low	163 3	1980 8/	Lbs. Lbs.	1,250 230	7/ 1977	163,000 18,000	1980 1959
Potatoes	1882	High Low	126 8	1985 1882	Cwt. Cwt.	550 61	1988 1883	66,960 918	1987 1883
Hops	1915	High Low	31 2	1981 1923	Lbs. Lbs.	2,380 1,187	1926 1925	59,470 2,680	1981 1919
All Hay	1909	High Low	1,046 760	1934 1987	Tons Tons	3.65 1.58	1984 1933	2,921 1,332	1984 1909
Mint Oil 9/	1929	High Low	43.2 .4	1978 1934	Lbs. Lbs.	118 25	1986 1932	3,528 13	1978 1932
Asparagus	1923	High Low	32.00 .45	1988 1923	Cwt. Cwt.	42 14	1945 1924	896 7	1988 1924
Carrots	1929	High Low	6.6 .5	1987 1929	Cwt. Cwt.	520 150	1988 1929	3,036 75	1987 1929
Green Peas, Processing	1928	High Low	90.10 1.44	1968 1928	Cwt. Cwt.	41.2 16.1	1987 1940	2,799 274	1965 1928
Lettuce	1918	High Low	5.00 .19	1934 1918	Cwt. Cwt.	240 100	1988 1943	680 34	1961 1918
Onions	1918	High Low	7.2 .8	1988 1918	Cwt. Cwt.	459 171	1966 1921	3,160 182	1988 1918
Snap Beans, Processing	1918	High Low	4.9 .1	1968 11/	Cwt. Cwt.	122.2 44.0	1961 1928	352 6	1968 1920
Sweet Corn, All	1934	High Low	54.60 .25	1982 1934	Cwt. Cwt.	176 42	1982 1934	9,621 500	1982 12/
Cranberries	1959	High Low	1.20 .95	13/ 14/	Cwt. Cwt.	162.0 42.7	1968 1960	162,000 42,711	1968 1960
Strawberries	1918	High Low	9.00 2.40	1932 1988	Cwt. Cwt.	96.0 16.2	1987 1930	496 66	1962 1918
Alfalfa Seed 15/	1939	High Low	38.0 1.7	1973 1943	Lbs. Lbs.	680 69	1967 1939	20,520 190	1973 1944
Kentucky Bluegrass Seed, All	1963	High Low	43.4 16.7	1973 1963	Lbs. Lbs.	667 193	1978 1977	22,531 3,910	1971 1977
Red Clover Seed, All 15/	1935	High Low	13.0 1.0	1978 16/	Lbs. Lbs.	490 125	10/ 1938	3,900 140	1978 1935

1/ 1978, 1980, 1982, 1984. 2/ 1986, 1987, 1988. 3/ 1946, 1947. 4/ No estimates for 1931-36. 5/ 1930, 1937.
6/ Excludes both wrinkled seed peas and Austrian winter peas. 7/ 1974, 1985. 8/ 1952, 1953. 9/ Only peppermint
before 1952. 10/ 1987, 1988. 11/ 1920, 1921. 12/ 1934, 1936. 13/ 1985, 1986, 1987, 1988. 14/ 1959, 1962.
15/ Estimates discontinued for 1982-84. 16/ 1935, 1936, 1973.

Record Highs and Lows in Washington Agriculture (continued)

Fruit	Year Estimates Started	Record High or Low	Production		
			Unit	Total	Year
Apples	1889	High Low	Million Pounds	5,000.0 13.6	1987 1889
Cherries, Sweet	1934	High Low	Tons	89,000 1,800	1983 1966
Pears, Bartlett	1919	High Low	Tons	172,125 28,925	1944 1920
Pears, Other	1919	High Low	Tons	165,000 10,250	1987 1924
Grapes	1909	High Low	Tons	249,500 900	1987 1/
Prunes	1919	High Low	Tons	45,200 9,100	1935 1986
Apricots	1927	High Low	Tons	28,000 800	1947 1965
Cherries, Tart 2/	1934	High Low	Tons	7,100 500	1940 1961
Peaches	1899	High Low	Million Pounds	123.1 1.0	1947 1965

Livestock	Year Estimates Started	Record High or Low	Inventory Jan. 1 or Production		
			Unit	Total	Year
All Cattle	1867	High Low	1,000 Head	1,579 81	1980 1867
Milk Cows	1867	High Low	1,000 Head	380 5	3/ 1867
Cattle and Calves on Feed	1930	High Low	1,000 Head	221 6	4/ 1935
Chickens on Farms	1925	High Low	1,000 Head	8,250 4,800	1931 1951
Broilers	1934	High Low	1,000 Head	28,200 450	1988 1934
Hogs and Pigs	1867	High Low	1,000 Head	434 10	1944 1867
Sheep	1867	High Low	1,000 Head	815 53	1902 1985
Milk	1924	High Low	Million Pounds	3,966 1,540	1988 1924
Eggs	1925	High Low	Million Eggs	1,355 704	1985 1925
Mink Pelts	1969	High Low	1,000 Pelts	313 142	1969 1972
Bees	1913	High Low	1,000 Colonies	100 51	1959 1913

1/ 1909, 1910. 2/ Official estimates 1934-1971. 3/ 1943, 1944, 1945.

4/ October 1, 1984.

1988 SEASON REVIEW

Seeding of the 1988 winter wheat crop was underway in late August 1987 and was completed in early November. Above normal temperatures and below normal precipitation during November allowed a smooth completion of fall field activity. The clean-up of orchards, tying and pruning of caneberries, feeding livestock, maintenance and repairs, and the corn grain harvest were some of the activities during the month. Fall seeded plants emerged but suffered some moisture shortage stress. Rains across the State in December helped alleviate some of the soil moisture shortage. Above normal temperatures the first half of the month allowed pruning and tying of caneberries to continue and the digging of carrots to be completed.

Light rains and below normal temperatures in early January slowed the caneberry pruning and tying activity. The temperatures were above normal the remainder of the month which allowed pruning of both fruit trees and caneberries to continue. Cold temperatures and dry conditions stopped most farm activity the first week of February. The rest of the month was dry, except in the West and Southeast. Above normal temperatures allowed a lot of activity. Calving and lambing were underway in Adams, Douglas, and Lincoln Counties. Fertilizer application and spring field tillage were underway. Forced rhubarb and greenhouse tulips and daffodils were being harvested and pruning activities continued.

Rains and above normal temperatures during March allowed many farmers to get into the fields. The application of fertilizer and herbicides, and planting were the main activities. By the end of the month, grain planting was completed. Cool and wet weather at the beginning of April threatened the fruit tree blossoms, some damage was reported. The major activities for the month were: the application of fruit tree blossom thinning sprays, the beginning of asparagus, lettuce and spinach harvests, pruning grapes, fruits and caneberries, tying hops, the seeding of potatoes, and the emergence of crops. Rains and below normal temperatures the first week of May slowed farm activity. Normal temperatures and rains for the rest of May allowed crops to develop normally. Caneberry and strawberry plants were in bloom, winter wheat and barley were heading, and the first cutting of alfalfa hay got underway.

The first half of June was rainy and cold, while the second half was dry with above normal temperatures. Grapes were in bloom. The seeding of corn was completed. Strawberries were being picked. The cherry harvest was underway. Walla Walla Sweet Onions were being harvested. Cereal grain development was behind normal. Showers and below normal temperatures during the first two weeks of July was followed by dry and normal temperatures for the remainder of the month. Activities for the month included: the harvest of peaches and apricots, the harvest of raspberries and strawberries, the cherry harvest was completed, the harvest of potatoes was underway, the harvest of broccoli, carrots, green peas, sweet corn, and watermelons, the second cutting of alfalfa hay was underway. The grain harvest began with progress behind normal. August was mostly dry with average temperatures. Pears, early apples and stone fruits were being harvested. Many vegetables were being harvested including early cucumbers. The green pea harvest was completed. The cereal grain harvest was completed by the end of the month and the planting of fall crops was in full swing. Cutting corn silage and the third alfalfa crop and the harvest of hops were other activities during the month.

September was mostly dry and cooler than normal, except on the west side, where rain was received the last two weeks of the month. Many crops were being harvested including pears, apples, melons, squash, pumpkins, tomatoes, lima beans, carrots, onions, sweet corn, grapes and dry beans. The potato harvest was 50 percent complete by the end of the month. Rain fell on the west side throughout October and in the southeast corner the last week of the month. Temperatures were mainly above normal. The harvest of mint neared completion. Buckwheat, apples, potatoes and cranberry harvests continued. The fall harvest of everbearing strawberries and raspberries were completed on the west side.

November weather provided rain across the State with normal temperatures. The apple harvest was completed. Orchard cleanup, rodent control and mowing were the major activities. The potato and corn silage harvests were nearing completion. Carrots were being dug and the pruning of caneberries was underway. The harvest of grain corn was completed. There was some spraying to control the Russian wheat aphids. By the end of the month, the 1988 farming cycle was nearly complete. Equipment repair, maintenance and bookkeeping were activities through the winter months.

WEATHER STATIONS

The weather stations listed on the next four pages are represented in their general locations on the map. The stations selected were based on availability of data from the National Oceanic and Atmospheric Administration (NOAA). Each station had to have sufficient data to represent the current year's departure from normal before it was included.



AVERAGE TEMPERATURES (F) FOR 1988, WASHINGTON

STATION DISTRICT	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
WEST													
ABERDEEN	41.1	45.0	45.8	50.1	53.3	56.5	61.0	61.1	58.2	55.9	46.6	42.2	51.4
BELLINGHAM	38.0	42.4	44.4	49.2	54.5	58.0	62.3	62.6	57.1	53.0	45.4	40.9	50.7
CENTRALIA	39.8	44.3	46.0	51.6	56.0	60.0	65.9	65.6	60.9	56.6	46.2	41.6	52.9
EVERETT	38.6	42.1	44.0	49.1	54.5	57.9	61.8	64.1	58.4	54.1	46.0	41.8	51.0
FORKS	39.3	44.8	44.6	49.7	53.8	56.7	61.7	62.6	58.6	54.8	44.4	41.1	51.0
LONGVIEW	39.2	44.1	46.2	50.7	54.6	59.1	64.1	64.0	60.1	56.5	46.5	41.0	52.2
OLYMPIA	37.9	42.5	43.8	48.4	53.3	56.7	62.6	62.1	57.3	53.8	43.0	39.3	50.1
SEA-TAC	40.1	44.4	45.6	50.3	54.9	59.6	65.3	65.4	60.5	55.4	45.4	41.9	52.4
SEDRO WOOLEY	40.6	42.5	44.9	49.8	54.8	58.7	61.9	62.7	58.1	53.6	45.2	41.8	51.2
VANCOUVER	38.2	42.5	45.5	51.0	54.2	59.8	64.9	63.7	60.1	56.1	45.7	40.1	51.8
CENTRAL													
BICKLETON	28.0	36.8	39.7	47.6	50.9	58.6	67.3	67.3	60.5	57.0	37.6	31.5	48.6
CHELAN	26.4	34.3	43.9	53.2	59.0	65.7	73.1	72.4	63.0	55.9	39.7	29.9	51.4
CLE ELUM	28.3	36.6	40.0	47.4	52.6	58.6	66.3	65.1	57.2	53.2	37.6	29.4	47.7
DALLESPORE	34.8	42.9	47.0	54.3	59.4	66.0	73.2	72.1	66.2	61.1	45.5	38.2	55.1
KENNEWICK	33.8	41.1	47.3	55.2	61.7	67.9	75.2	73.4	64.7	59.5	46.9	34.2	55.1
WENATCHEE	28.7	37.3	45.6	54.1	59.5	66.1	74.2	73.2	64.3	57.3	41.7	30.8	52.7
WINTHROP	18.4	27.6	39.8	49.9	55.2	61.5	68.0	67.2	59.5	51.4	33.7	23.3	46.3
YAKIMA	28.8	38.2	42.2	51.1	55.1	62.1	69.2	67.7	59.5	55.1	39.5	28.1	49.7
NORTHEAST													
CHEWELAH	23.2	33.8	40.9	49.8	55.3	61.5	67.6	67.4	57.4	51.3	36.5	27.7	47.7
NEWPORT	25.0	31.7	39.6	50.0	54.7	61.0	65.7	65.8	57.2	51.2	36.2	27.6	47.1
NORTHPORT	24.6	31.5	40.7	51.8	58.1	63.7	69.2	69.1	59.6	50.9	36.6	28.5	48.7
SPOKANE	24.7	35.4	39.7	48.9	54.6	61.1	68.7	68.4	58.9	53.3	36.3	27.0	48.1
EAST CENTRAL													
EPHRATA	27.0	37.3	44.0	54.5	60.1	67.0	75.1	72.7	63.9	58.1	40.1	28.4	52.4
LIND	28.7	38.0	42.4	51.9	56.7	63.2	70.1	69.2	61.6	56.8	40.7	29.3	50.7
OTHELLO	31.8	40.0	46.0	52.1	57.6	64.1	69.7	68.8	61.3	56.6	43.2	31.5	51.9
QUINCY	26.0	36.2	44.2	52.2	57.3	63.3	70.9	69.7	61.0	55.8	40.6	28.4	50.5
RITZVILLE	26.3	36.4	41.0	49.7	54.6	62.1	68.9	68.8	59.9	56.2	39.0	28.7	49.3
WILBUR	23.3	33.5	39.3	48.2	53.6	59.6	66.7	66.2	57.7	53.0	34.8	27.0	46.9
SOUTHEAST													
COLFAX	29.4	37.1	41.0	49.5	54.3	61.1	66.5	65.4	58.2	53.9	39.9	31.1	49.0
DAYTON	32.2	38.8	43.4	51.5	56.8	63.5	70.7	70.0	61.7	57.4	44.0	33.2	51.9
PULLMAN	28.1	37.3	39.5	47.9	52.9	59.1	65.0	65.9	58.3	55.6	38.5	29.7	48.2
ROSALIA	26.6	36.2	39.9	48.2	53.5	59.4	66.2	66.3	57.9	54.5	38.2	29.6	48.0
WALLA WALLA	33.0	42.0	45.6	53.9	59.4	66.5	75.3	73.7	65.2	59.7	45.3	32.8	54.4

AVERAGE TEMPERATURE DEPARTURES FROM NORMAL (F), 1988, WASHINGTON

STATION DISTRICT	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
WEST													
ABERDEEN	1.20	2.00	1.80	2.20	.40	-.80	.50	.20	-1.10	3.10	1.20	.50	.90
BELLINGHAM	1.40	1.60	1.80	1.60	1.00	-.40	.20	.70	-.30	2.80	2.30	1.70	1.20
CENTRALIA	.80	1.70	1.40	2.20	.60	-.40	1.10	1.30	.70	4.30	1.80	.90	1.40
EVERETT	.20	.10	.20	.50	.20	-1.30	-1.10	1.60	.20	2.70	2.00	1.10	.50
FORKS	.50	3.00	2.20	3.30	2.14	.50	1.50	2.10	.40	3.20	.30	.50	1.60
LONGVIEW	.40	1.50	1.50	1.60	-.10	-.60	.00	-.20	-.70	3.30	1.50	.30	.70
OLYMPIA	.70	1.70	1.10	1.10	.20	-1.70	-.40	-.40	-.80	3.70	.40	.30	.50
SEA-TAC	1.00	1.60	1.40	1.60	-.10	-.60	.50	1.30	.50	2.90	.60	.90	1.00
SEDRO WOOLEY	2.90	.80	1.20	1.20	.40	-.30	-.40	.30	-.40	2.40	1.40	1.70	.90
VANCOUVER	.00	.10	.40	1.30	-1.60	-1.20	-.80	-1.60	-1.40	2.90	.90	-.20	-.10
CENTRAL													
BICKLETON	-.20	3.00	2.30	3.50	-.90	-.50	.10	1.20	1.10	8.50	1.30	.20	1.60
CHELAN	.00	1.20	3.60	3.50	.14	-.50	.40	.90	.60	5.50	1.90	-.30	1.40
CLE ELUM	2.00	3.70	2.70	2.80	.10	-.70	.30	.50	.30	6.60	1.90	-.50	1.60
DALLESPOET	1.40	2.80	1.80	2.10	-.70	-.80	.10	-.10	.70	7.10	3.30	1.70	1.60
KENNEWICK	.70	1.10	1.30	1.70	.00	-1.00	.20	.40	.10	6.20	5.10	-1.80	1.20
WENATCHEE	1.00	2.30	2.90	2.40	-.70	-1.30	.40	.90	.60	6.10	2.90	-.80	1.40
WINTHROP	.00	.70	4.80	4.10	.60	.20	.60	1.0	1.60	5.20	1.70	1.30	1.80
YAKIMA	.60	2.10	.30	1.90	-2.20	-2.40	-1.20	-.90	-1.40	5.20	1.30	-3.40	.00
NORTHEAST													
CHEWELAH	-.50	3.40	3.80	3.80	1.20	.90	1.60	2.50	.60	5.50	2.10	.00	2.10
NEWPORT	.50	.90	4.00	5.50	1.80	1.10	-.10	1.50	1.10	6.00	2.60	-.10	2.10
NORTHPORT	-1.00	-.50	1.80	3.20	.60	-.30	-.60	1.0	-.10	2.80	1.10	-.40	.60
SPOKANE	-1.00	3.00	2.10	3.10	.30	-.60	-1.00	.30	-.50	5.70	1.40	-2.00	.90
EAST CENTRAL													
EPHRATA	.80	3.00	2.20	3.70	-.20	-1.10	-.50	-.90	-1.00	6.40	2.70	-1.40	1.10
LIND	.30	2.00	1.00	3.50	-.10	-1.00	-1.20	-.30	-.30	6.40	2.90	-2.30	.90
OTHELLO	3.30	3.90	3.80	2.40	-.50	-1.30	-1.90	-1.10	-1.10	5.90	5.10	-.20	1.50
QUINCY	.50	2.20	3.00	2.20	-1.40	-2.30	-.70	-.50	-1.40	5.70	3.90	-.70	.90
RITZVILLE	-.60	2.40	1.50	2.90	-.20	-.40	-1.00	.30	-1.00	6.80	2.50	-1.60	1.00
WILBUR	-1.70	1.70	1.50	2.20	-.60	-1.50	-1.10	-.20	-1.10	5.40	-.50	-1.50	.20
SOUTHEAST													
COLFAX	-.20	1.20	1.20	2.80	.10	.20	-.70	-.60	-.40	5.30	1.80	-1.80	.70
DAYTON	.00	.60	.90	2.80	.50	.10	-.20	.70	.00	6.00	3.60	-2.10	1.10
PULLMAN	-.10	3.00	1.50	2.80	.30	.00	-.90	.40	-.50	6.70	1.40	-2.00	1.10
ROSALIA	-.70	2.60	2.00	3.00	.70	.10	-.10	.60	-.10	6.70	1.90	-1.00	1.30
WALLA WALLA	-.30	2.30	.80	2.50	.30	-.40	.20	.30	.00	5.90	3.50	-3.50	1.00

PRECIPITATION FOR 1988, WASHINGTON

STATION DISTRICT	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
WEST													
ABERDEEN	8.76	4.32	11.52	6.54	5.79	2.19	1.46	.80	2.96	5.12	14.26	9.92	73.64
BELLINGHAM	2.16	1.77	3.98	3.31	4.31	1.92	1.22	.74	2.09	5.14	5.52	5.41	37.57
CENTRALIA	5.42	2.40	5.43	4.13	3.51	2.17	.73	.53	1.90	1.07	10.69	4.74	42.72
EVERETT	3.24	1.02	5.28	3.70	3.61	2.61	.92	.39	2.07	2.05	7.31	3.87	36.07
FORKS	11.03	7.74	15.31	11.69	10.62	2.71	2.13	1.19	5.74	10.20	18.57	13.78	110.71
LONGVIEW	5.66	4.10	6.20	3.68	4.71	2.06	1.10	1.15	2.38	1.62	8.92	4.81	46.39
OLYMPIA	5.18	2.35	5.66	4.94	3.36	2.06	.42	.43	1.93	2.26	10.14	5.16	43.89
SEA-TAC	4.07	.71	3.75	3.20	3.01	1.56	.50	.28	1.75	2.24	8.43	3.48	32.98
SEDRO WOOLLEY	2.37	2.56	6.66	6.22	4.31	1.85	1.76	.51	2.71	5.87	7.26	4.90	46.98
VANCOUVER	5.73	2.11	4.47	3.75	3.24	2.88	.44	.20	1.41	.25	9.50	3.00	36.98
CENTRAL													
BICKLETON	1.91	.05	.99	1.68	.26	.51	.13	.00	.14	.02	3.88	1.04	10.61
CHELAN	.57	.05	.20	.76	.78	.99	.00	.12	.27	.06	2.59	1.66	8.05
CLE ELUM	1.63	2.25	2.43	1.25	.84	1.14	.08	.06	.65	1.48	5.84	2.39	20.04
DALLESPOUT	2.61	.19	.84	1.46	.22	.87	.02	.00	.11	.01	3.40	.71	10.44
KENNEWICK	.72	.02	.50	.41	.90	.35	.18	.00	.38	.03	.79	.38	4.66
WENATCHEE	.63	.02	.11	.92	.13	1.30	.00	.10	.07	.03	1.50	.87	5.68
WINTHROP	.91	.19	.60	1.20	.61	1.89	.22	.25	.26	.16	2.63	1.50	10.42
YAKIMA	.68	.00	.21	1.41	.18	1.00	.00	.00	.13	.05	1.12	.67	5.45
NORTHEAST													
CHEWELAH	1.93	.46	2.30	.94	2.04	2.95	.05	.14	2.11	.12	4.77	2.26	20.07
NEWPORT	2.05	.65	1.42	2.18	1.77	2.41	.28	.09	1.66	.41	5.17	2.99	21.08
NORTHPORT	.93	.88	2.33	1.28	1.75	2.49	.20	.54	2.70	.29	3.45	1.67	18.51
SPOKANE	1.76	.35	1.57	2.15	1.50	1.12	.23	.00	1.63	.11	4.35	1.75	16.52
EAST CENTRAL													
EPHRATA	.67	.00	.37	.59	.46	.14	.00	.00	.28	.03	1.15	.57	4.26
LIND	.43	.01	1.09	1.57	1.25	.56	.21	.00	.94	.14	2.13	.41	8.74
OTHELLO	.50	.02	.94	.87	.78	.27	.08	.02	.39	.03	1.55	.46	5.91
QUINCY	.41	.00	.26	.40	.25	.50	.00	.00	.18	.00	1.39	.91	4.30
RITZVILLE	.84	.01	1.28	1.31	1.33	.79	.16	.00	.81	.12	3.07	.70	10.42
WILBUR	.57	.00	1.09	1.26	.82	.40	.00	.00	.58	.14	2.85	1.10	8.81
SOUTHEAST													
COLFAX	2.35	.67	2.43	2.09	1.71	1.28	.68	.00	.94	.37	3.52	1.28	17.32
DAYTON	2.82	.92	2.84	2.57	1.55	1.19	.37	.00	1.06	.14	3.61	1.28	18.35
PULLMAN	2.15	.89	2.56	2.00	1.76	1.43	.99	.04	.91	.75	4.30	1.42	19.20
ROSALIA	2.07	.49	1.86	2.04	1.60	1.70	.63	.01	1.39	.41	3.46	1.22	16.88
WALLA WALLA	3.46	.97	2.86	2.83	2.04	.83	.11	.00	.38	.10	4.15	1.40	19.13

PRECIPITATION, DEPARTURES FROM AVERAGE, 1988, WASHINGTON

STATION DISTRICT	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
WEST													
ABERDEEN	-4.34	-5.43	2.46	1.03	2.44	-.31	.19	-1.32	-.70	-2.17	3.30	-3.85	-8.70
BELLINGHAM	-2.63	-1.74	1.01	.88	2.30	.21	.11	-.67	.04	1.65	.88	.27	2.31
CENTRALIA	-1.96	-2.58	.70	1.12	1.48	.39	-.11	-.93	-.32	-3.06	4.25	-2.97	-3.99
EVERETT	-1.53	-2.46	1.76	1.12	1.37	.55	-.16	-1.16	.01	-1.14	2.83	-1.35	-.16
FORKS	-6.96	-6.68	2.46	3.74	5.78	-.34	-.16	-1.59	.28	-1.27	2.65	-6.26	-8.35
LONGVIEW	-1.30	-.31	1.72	.38	2.35	.07	.25	-.43	.17	-2.45	2.64	-2.84	.25
OLYMPIA	-3.32	-3.42	.81	1.81	1.51	.62	-.34	-.91	-.43	-2.42	2.56	-3.54	-7.07
SEA-TAC	-1.97	-3.51	.16	.80	1.43	.18	-.24	-.99	-.27	-1.19	2.83	-2.85	-5.62
SEDRO WOOLEY	-3.66	-2.08	2.67	2.66	1.68	-.44	.24	-1.47	-.38	1.52	1.49	-1.69	.54
VANCOUVER	-.98	-2.23	.66	1.14	1.00	1.26	-.13	-1.02	-.47	-3.21	3.89	-4.00	-4.09
CENTRAL													
BICKLETON	-.69	-1.51	-.16	.88	-.54	-.16	-.19	-.36	-.31	-.80	1.77	-1.50	-3.57
CHELAN	-.82	-.98	-.65	-.08	.16	.39	-.30	-.43	-.25	-.67	1.16	-.05	-2.52
CLE ELUM	-2.51	-.21	.52	-.02	.07	.44	-.19	-.53	-.16	-.15	2.33	-2.20	-2.61
DALLESPORT	-.27	-1.29	-.26	.96	-.23	.56	-.06	-.32	-.27	-.92	1.37	-2.00	-2.73
KENNEWICK	-.45	-.64	-.04	-.05	.31	-.09	-.01	-.40	.01	-.53	-.20	-.80	-2.89
WENATCHEE	-.74	-.83	-.49	.30	-.42	.77	-.15	-.56	-.28	-.54	.35	-.58	-3.17
WINTHROP	-1.44	-1.21	-.29	.44	-.22	1.06	-.36	-.58	-.38	-.66	.85	-1.40	-4.19
YAKIMA	-.76	-.74	-.44	.91	-.30	.40	-.14	-.36	-.20	-.42	.15	-.63	-2.53
NORTHEAST													
CHEWELAH	-.63	-1.30	.66	-.51	.07	1.59	-.75	-.98	1.07	-1.29	2.31	-.86	-.62
NEWPORT	-1.92	-2.00	-.75	.31	-.39	.65	-.65	-1.20	.34	-1.66	1.62	-1.21	-6.86
NORTHPORT	-1.40	-.76	.98	.00	-.12	.57	-.78	-.82	1.54	-1.12	1.34	-.98	-1.55
SPOKANE	-.71	-1.26	.21	1.07	.12	-.11	-.27	-.74	.92	-.97	2.29	-.74	-.19
EAST CENTRAL													
EPHRATA	-.32	-.67	-.25	.06	-.08	-.39	-.25	-.28	-.04	-.46	.23	-.57	-3.02
LIND	-.68	-.82	.38	.89	.44	-.09	-.06	-.42	.45	-.61	.95	-.90	-.47
OTHELLO	-.62	-.77	.34	.36	.13	-.30	-.14	-.31	.05	-.51	.57	-.69	-1.89
QUINCY	-.58	-.75	-.40	-.22	-.33	-.01	-.26	-.36	-.19	-.52	.35	-.28	-3.55
RITZVILLE	-.58	-1.06	.37	.49	.45	.03	-.18	-.46	.23	-.77	1.60	-1.03	-.91
WILBUR	-.87	-1.02	.15	.39	-.36	-.48	-.45	-.70	-.12	-.73	1.27	-.58	-3.50
SOUTHEAST													
COLFAX	-.39	-1.18	.62	.51	.25	-.07	.18	-.83	.00	-1.08	1.27	-1.76	-2.48
DAYTON	.22	-.68	1.01	1.10	.22	.00	-.08	-.76	.17	-1.36	1.39	-1.51	-.28
PULLMAN	-.74	-1.20	.60	.42	.24	-.06	.46	-.91	-.08	-.86	1.66	-1.65	-2.12
ROSALIA	-.28	-1.07	.43	.74	.12	.38	.12	-.84	.59	-.93	1.45	-1.20	-.49
WALLA WALLA	1.04	-.62	1.20	1.24	.48	-.21	-.31	-.82	-.57	-1.44	1.86	-1.08	.77

Prices Received by Farmers, Washington

Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Crop Year or Season Average 1/
All Wheat													
Dollars Per Bushel													
1984							3.50	3.40	3.37	3.44	3.45	3.42	3.45
1985	3.43	3.51	3.60	3.67	3.57	3.39	3.30	3.24	3.30	3.38	3.48	3.50	3.41
1986	3.48	3.43	3.53	3.65	3.54	2.96	2.59	2.38	2.40	2.44	2.53	2.58	2.51
1987	2.62	2.74	2.83	2.81	2.78	2.68	2.53	2.56	2.63	2.76	2.72	2.74	2.82
1988	2.93	2.91	2.88	2.93	3.12	2.53	3.79	3.86	4.06	4.15	4.30	4.43	4.25
1989	4.56	4.57	4.39	4.42	4.33	4.14							
Barley													
Dollars Per Bushel													
1984							2.35	2.28	2.21	2.26	2.35	2.35	2.25
1985	2.28	2.25	2.13	2.19	2.16	1.97	1.97	1.86	1.81	1.90	2.01	2.14	1.95
1986	2.11	1.95	1.91	1.90	1.91	1.58	1.45	1.49	1.66	1.66	1.68	1.61	1.67
1987	1.73	1.79	1.85	1.88	1.90	2.04	1.92	1.82	1.85	1.84	1.89	1.92	1.87
1988	1.91	1.84	1.77	1.83	2.00	2.46	2.43	2.51	2.40	2.36	2.44	2.37	2.45
1989	2.41	2.41	2.50	2.52	2.58	2.46							
Potatoes													
Dollars Per Cwt.													
1984									9.50	5.15	3.90	4.20	5.15
1985	5.25	5.30	4.75	4.90	4.95	4.85	4.70	3.20	3.00	3.10	3.30	3.60	3.45
1986	3.70	3.70	3.65	3.80	3.65	4.25	4.25	5.20	3.90	3.75	4.20	4.45	4.30
1987	4.50	4.35	4.30	4.60	4.65	5.00	4.10	4.05	3.30	3.40	3.30	3.80	3.65
1988	3.85	3.60	3.90	3.85	3.90	3.80	4.00	5.35	3.75	3.60	4.75	4.50	4.50
1989	4.65	4.80	5.15	5.05	5.60	5.50	4.40						
All Hay													
Dollars Per Ton													
1984							83.00	95.00	81.00	70.00	74.00	69.00	80.50
1985	83.00	72.00	90.00	99.00	95.00		90.00	83.00	77.00	73.00	80.00	78.00	84.50
1986	92.00	95.00	95.00	94.00	84.00		81.00	68.00	68.00	60.00	60.00	58.00	60.00
1987	52.00	48.00	45.00	40.00	57.00		57.00	54.00	58.00	52.00	52.00	54.00	54.50
1988	55.00	55.00	55.00	54.00	66.00		73.00	76.00	72.00	75.00	80.00	76.00	78.50
1989	83.00	83.00	90.00	86.00	93.00								
Apples (Fresh Use)													
Cents Per Pound													
1984										19.5	16.6	14.9	13.3
1985	11.9	11.5	13.7	12.6	11.7	12.1	11.8	10.3		17.0	18.1	19.2	20.4
1986	18.7	18.9	18.9	19.3	24.8	25.5	28.5	31.0		18.9	16.2	15.5	18.6
1987	18.1	19.1	18.3	19.8	23.4	26.2	26.1	13.2		13.6	7.8	6.9	10.4
1988	9.2	11.2	10.6	8.7	9.9	10.1	23.1	30.8		25.0	19.2	17.2	15.7
1989	18.0	21.0	15.5	13.3	12.6	9.9	9.1	12.3					

1/ Crop year begins with month to right of heavy line. Data for the 1988 marketing year monthly prices are preliminary prices.

Prices Received by Farmers, Washington (continued)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual Average
Dollars Per Cwt.													
Cows 1/													
1984	36.20	39.40	40.30	41.10	39.80	40.70	39.00	38.20	35.70	35.40	32.50	34.60	37.50
1985	37.50	39.80	39.90	39.50	38.00	36.90	33.90	35.40	33.90	31.30	31.20	31.10	35.40
1986	32.60	35.00	36.50	32.60	34.10	33.70	35.50	35.30	35.30	34.60	33.80	34.60	34.30
1987	38.40	41.40	43.10	43.20	43.00	43.70	43.50	43.90	44.30	42.70	41.00	43.00	42.70
1988	44.80	46.70	48.10	47.50	48.40	42.80	45.10	46.50	45.00	42.40	42.00	42.90	45.30
Steers and Heifers													
1984	66.90	65.80	66.50	66.10	64.80	62.50	62.30	61.40	59.40	58.10	61.10	63.00	62.90
1985	63.10	63.30	60.00	59.10	56.10	57.30	52.10	49.90	50.90	51.90	58.30	61.70	56.80
1986	58.20	54.20	54.30	52.00	53.90	52.60	55.50	56.90	57.50	56.80	59.60	59.30	55.90
1987	59.30	61.60	61.60	65.80	67.00	66.20	62.50	62.50	62.90	66.00	63.80	63.90	63.60
1988	64.70	68.10	69.60	70.40	72.30	68.00	63.50	65.60	67.20	69.10	70.10	71.40	68.30
Calves													
1984	52.30	57.80	61.00	60.80	62.20	65.60	55.80	46.50	47.10	51.80	51.10	55.50	55.10
1985	56.60	59.80	58.60	60.90	61.90	54.10	48.60	47.20	47.00	53.70	49.10	46.60	53.70
1986	49.20	53.60	53.60	50.00	50.60	49.50	49.90	52.00	55.10	54.90	54.90	57.90	52.90
1987	64.00	66.80	71.10	71.60	74.60	74.40	74.90	75.00	73.90	81.30	79.60	80.30	76.00
1988	81.10	86.90	88.60	89.00	94.60	89.20	89.70	82.20	81.20	81.80	77.90	80.90	84.80
Milk Sold to Plants, All													
1984	13.10	12.90	12.80	12.80	12.80	12.80	12.80	13.00	13.20	13.40	13.70	13.40	13.10
1985	13.50	13.20	12.90	12.60	12.40	12.00	11.90	11.90	11.90	12.00	12.10	12.10	12.40
1986	12.00	12.00	11.80	11.80	11.80	11.70	11.80	12.00	12.30	12.50	12.70	12.80	12.10
1987	12.80	12.50	12.20	12.00	11.80	11.90	11.90	12.00	12.30	12.50	12.60	12.50	12.20
1988	12.40	12.10	11.80	11.50	11.30	11.20	11.30	11.60	12.20	12.60	13.20	13.30	12.00
Dollars Per Head													
Milk Cows 2/													
1984	980	-	-	1,010	-	-	1,000	-	-	1,000	-	-	1,000
1985	980	-	-	1,010	-	-	960	-	-	900	-	-	965
1986	870	-	-	870	-	-	920	-	-	950	-	-	905
1987	1,020	-	-	1,080	-	-	1,090	-	-	1,100	-	-	1,070
1988	1,100	-	-	1,210	-	-	1,190	-	-	1,140	-	-	1,160

1/ Beef cows sold for slaughter and herd replacement, and cull dairy cows sold for slaughter.

2/ Dairy cows sold for dairy herd replacement. Prices estimated quarterly beginning January 1982.

Prices Paid by Farmers, Washington

Commodity/ Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
(Dollars Per Ton)												
Chick Starter												
1984	235	230	250	245	255	235	235	230	225	215	215	205
1985	205	210	210	210	215	215	196	186	184	178	200	200
1986 1/	183	205	-	-	-	-	-	-	-	-	-	-
1986 2/	184	183	-	184	-	-	185	-	-	197	-	-
1987 2/	176	-	-	164	-	-	221	-	-	172	-	-
1988 2/	184	-	-	183	-	-	255	-	-	232	-	-
Broiler Grower												
1984	215	205	225	245	260	235	235	230	230	210	205	215
1985	200	200	200	200	215	210	197	186	184	176	176	180
1986 1/	179	191	-	-	-	-	-	-	-	-	-	-
1986 2/	190	186	-	184	-	-	194	-	-	184	-	-
1987 2/	181	-	-	193	-	-	221	-	-	171	-	-
1988 2/	179	-	-	174	-	-	234	-	-	225	-	-
Laying Feed												
1984	200	200	205	225	225	205	205	199	200	200	199	191
1985	205	200	205	200	205	205	199	193	189	195	186	188
1986 1/	186	198	-	-	-	-	-	-	-	-	-	-
1986 2/	171	167	-	163	-	-	170	-	-	159	-	-
1987 2/	155	-	-	167	-	-	180	-	-	153	-	-
1988 2/	151	-	-	155	-	-	227	-	-	203	-	-
Dairy Feed 14% Protein												
1984	187	186	189	189	183	176	180	181	178	165	169	157
1985	170	168	169	166	168	169	170	159	161	167	155	160
1986 1/	160	159	-	-	-	-	-	-	-	-	-	-
1986 2/	152	152	-	149	-	-	144	-	-	136	-	-
1987 2/	144	-	-	143	-	-	144	-	-	136	-	-
1988 2/	141	-	-	150	-	-	163	-	-	172	-	-
Dairy Feed 16% Protein												
1984	196	189	195	195	190	187	187	191	190	176	172	170
1985	181	171	174	173	189	182	190	171	170	172	165	164
1986 1/	164	169	-	-	-	-	-	-	-	-	-	-
1986 2/	161	161	-	157	-	-	155	-	-	144	-	-
1987 2/	147	-	-	142	-	-	149	-	-	146	-	-
1988 2/	152	-	-	153	-	-	188	-	-	192	-	-

Prices Paid by Farmers, Washington (continued)

Commodity/ Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
Dollars Per Ton												
Soybean Meal												
1984	410	410	390	410	410	400	400	390	380	360	350	330
1985	340	360	350	370	360	370	360	330	340	340	340	360
1986 1/	350	320	-	-	-	-	-	-	-	-	-	-
1986 2/	314	336	-	328	-	-	302	-	-	340	-	-
1987 2/	338	-	-	330	-	-	344	-	-	334	-	-
1988 2/	370	-	-	380	-	-	430	-	-	428	-	-
Cotton Seed Meal												
1984	350	380	400	420	400	430	450	440	440	470	420	420
1985	440	480	480	480	490	490	480	450	450	460	450	420
1986 1/	420	440	-	-	-	-	-	-	-	-	-	-
1986 2/	248	266	-	262	-	-	266	-	-	274	-	-
1987 2/	278	-	-	278	-	-	286	-	-	300	-	-
1988 2/	306	-	-	310	-	-	346	-	-	334	-	-
Dollars Per Gallon												
Gasoline, Unleaded Service Station												
1984	1.24	1.22	1.21	1.23	1.24	1.26	1.25	1.24	1.24	1.25	1.26	1.26
1985	1.26	1.23	1.21	1.24	1.23	1.27	1.26	1.25	1.25	1.26	1.27	1.26
1986 1/	1.25	1.21	-	-	-	-	-	-	-	-	-	-
1986 2/	1.22	1.15	-	1.00	-	-	.95	-	-	.89	-	-
1987 2/	.86	-	-	.90	-	-	.97	-	-	1.02	-	-
1988 2/	.95	-	-	.95	-	-	.98	-	-	.96	-	-
Gasoline, Regular Bulk Delivery												
1984	1.19	1.16	1.15	1.21	1.22	1.21	1.21	1.19	1.19	1.21	1.21	1.21
1985	1.20	1.16	1.16	1.18	1.19	1.21	1.20	1.19	1.20	1.20	1.20	1.19
1986 1/	1.20	1.14	-	-	-	-	-	-	-	-	-	-
1986 2/	1.13	1.06	-	.89	-	-	.87	-	-	.80	-	-
1987 2/	.81	-	-	.89	-	-	.90	-	-	.96	-	-
1988 2/	.89	-	-	.90	-	-	.94	-	-	.93	-	-
Diesel Fuel												
1984	.97	.96	.95	.98	.96	.95	.94	.92	.91	.93	.93	.92
1985	.92	.91	.90	.91	.93	.92	.91	.90	.89	.90	.94	.97
1986 1/	.97	.89	-	-	-	-	-	-	-	-	-	-
1986 2/	.97	.86	-	.63	-	-	.54	-	-	.59	-	-
1987 2/	.64	-	-	.60	-	-	.69	-	-	.81	-	-
1988 2/	.72	-	-	.74	-	-	.73	-	-	.68	-	-

1/ State estimates were discontinued in March, 1986.

2/ Pacific Regional estimates (California, Oregon, and Washington) are made on a quarterly basis.

Prices Paid by Farmers, Northwest Region 1/

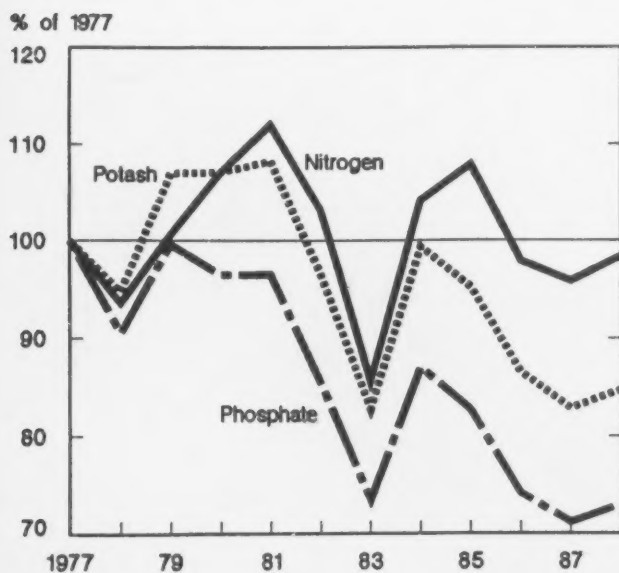
Item	Month	1984	1985	1986 2/	1987 2/	1988 2/
Dollars Per Ton						
Northwest Region 2/ Anhydrous Ammonia	March	372	363	344	306	308
	May	359	362	-	-	-
	October	367	357	306	291	295
	December	354	359	-	-	-
Nitrogen Solutions, 32%	March	198	192	170	155	160
	May	197	190	-	-	-
	October	197	195	165	152	161
	December	190	194	-	-	-
Superphosphate, 44-46%	March	240	232	200	210	222
	May	238	232	-	-	-
	October	230	229	200	216	223
	December	230	227	-	-	-

1/ Northwest Region includes Idaho, Oregon, and Washington.

2/ Data for 1986, 1987, and 1988 were published in April and October.

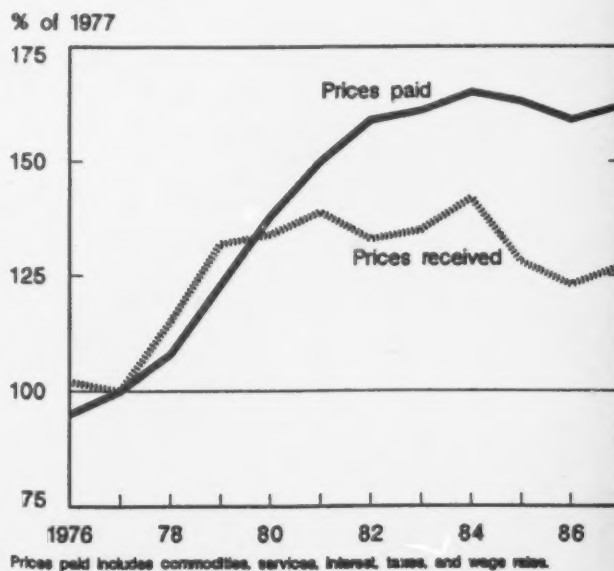
Farm fertilizer use, U.S.

Fertilizer use rose in 1987 for the first time since 1984, due to stable crop acreage and higher commodity prices.



Prices received and paid by farmers, U.S.

Prices for most major commodities were higher in 1987, with prices for cattle and soybeans rising over 15 percent. The prices received index rose 3 percent in 1987, while the prices paid index rose 2 percent.



Index of Prices Received and Paid by Farmers, United States

Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Annual
Prices Received 1977=100													
All Farm Products													
1985	135	134	134	131	130	128	125	121	121	123	127	127	128
1986	124	122	122	121	123	122	125	125	123	123	124	120	123
1987	121	122	122	125	129	130	128	126	128	129	130	127	126
1988	131	130	130	130	135	139	142	144	144	143	144	145	138
All Crops													
1985	126	123	127	126	125	122	121	114	113	111	114	117	120
1986	113	111	112	114	115	109	106	100	98	100	102	99	107
1987	100	99	101	102	109	109	108	101	105	110	117	111	106
1988	114	110	111	112	118	129	137	136	135	133	136	136	126
All Livestock and Products													
1985	144	145	141	136	134	134	130	128	128	134	138	137	136
1986	135	133	132	127	131	134	143	148	146	145	145	141	138
1987	141	144	142	147	148	149	148	150	152	147	143	141	146
1988	146	149	148	148	151	147	147	152	153	152	151	154	150
Prices Paid 1/													
Commodities, Services, Interest, Taxes, and Wage Rates 4/													
1985	163	163	163	163	163	163	162	162	161	161	162	162	162
1986	161	160	-	159	-	-	159	-	-	158	-	-	159
1987	157	-	-	161	-	-	163	-	-	164	-	-	161
1988	165	-	-	168	-	-	172	-	-	173	-	-	170
Items Used for Production 4/													
1985	154	154	153	153	152	151	150	149	148	148	149	149	151
1986	148	147	-	143	-	-	143	-	-	142	-	-	144
1987	142	-	-	146	-	-	148	-	-	150	-	-	147
1988	152	-	-	155	-	-	159	-	-	162	-	-	157
Interest 2/* Taxes 3/* Farm Services & Cash Rent*													
1985	228						136			150			
1986	211						138			145			
1987	190						139			144			
1988	186						142			147			
Wage Rates 4/													
1985	154	154	154	158	158	158	154	154	154	150	150	150	154
1986	160	150	-	164	-	-	166	-	-	158	-	-	160
1987	159	-	-	171	-	-	173	-	-	161	-	-	167
1988	161	-	-	175	-	-	177	-	-	170	-	-	172
Production Items, Interest, Taxes, and Wage Rates													
1985	159	159	158	158	158	157	156	155	154	154	154	154	156
1986	152	152	-	150	-	-	150	-	-	148	-	-	150
1987	147	-	-	152	-	-	153	-	-	153	-	-	151
1988	155	-	-	158	-	-	162	-	-	163	-	-	160
Ratio of Prices Received to Prices Paid 4/													
1985	83	82	82	80	80	79	77	75	75	76	78	78	79
1986	77	76	76	76	77	77	79	79	77	78	78	76	77
1987	77	78	78	78	80	81	79	77	79	79	79	77	79
1988	79	79	79	77	80	83	83	84	84	83	83	84	82

* Information collected yearly but is used as a component of monthly index.

1/ Estimates made on a quarterly basis starting with March 1986.

2/ Interest on indebtedness secured by farm real estate.

3/ Taxes on farm real estate.

4/ Ratio of index of prices received by farmers to index of prices paid, interest, taxes, and wage rates.

Gross and Net Farm Income, Washington 1/

Item	1983	1984	1985	1986	1987
Million Dollars					
Cash Receipts From Marketings	2,840.3	3,118.8	2,828.9	2,807.3	2,841.4
Government Payments	153.8	171.0	155.1	298.7	292.2
Non-Money Income	322.4	337.4	332.0	293.5	265.3
Other Farm Income 2/	126.9	141.1	172.6	184.9	199.3
Value of Inventory Adjustment	110.2	-39.7	-112.4	31.0	113.1
Total Gross Farm Income	3,553.6	3,728.6	3,376.2	3,615.4	3,711.3
Farm Production Expenses	2,743.7	2,724.1	2,583.3	2,405.3	2,397.4
Total Net Farm Income	809.9	1,004.6	792.8	1,210.1	1,313.9

Farm Production Expenses, Washington 1/

Item	1983	1984	1985	1986	1987
Million Dollars					
Intermediate Product Expense					
Farm Origin:					
Feed	415.1	383.6	340.3	301.7	287.3
Livestock & Poultry	78.1	90.2	81.9	75.3	115.4
Seed	52.5	60.4	58.7	52.3	52.7
Total	545.7	534.2	480.9	429.3	455.5
Manufactured Input:					
Fertilizer and Lime	175.3	157.8	147.4	115.5	108.4
Pesticides	99.2	113.9	119.3	107.1	109.6
Fuel and Oil	120.4	114.7	105.7	76.9	71.3
Electricity	46.4	46.8	46.5	42.0	51.7
Total	441.3	433.2	418.8	341.5	341.0
Other	431.2	452.9	433.8	430.0	430.9
Total Intermediate	1,418.3	1,420.3	1,333.5	1,200.8	1,227.3
Interest	370.7	376.7	363.4	328.9	305.9
Contract and Hired Labor	353.3	352.8	355.7	358.3	390.0
Net Rent to Nonoperator					
Landlords	136.4	136.3	107.2	131.1	133.3
Capital Consumption	384.8	370.1	340.7	305.5	262.9
Property Taxes	80.1	67.9	82.8	80.7	78.0
Total Production Expense 3/	2,743.7	2,724.1	2,583.3	2,405.3	2,397.4

- 1/ Source: Economic Indicators of the Farm Sector, State Financial Summary, 1987, ERS, USDA, November, 1988. Includes operator dwellings. Data may not add due to rounding.
- 2/ Includes Forest Product sales, recreational income, and other farm business-related income.
- 3/ Includes repair and maintenance; machine hire and custom work expenses; marketing, storage and transportation expense; and miscellaneous expenses.

Balance Sheet of Washington Farms, December 31 1/

Item 2/	1983	1984	1985	1986	1987
Million Dollars					
Total Farm Assets	20,087.9	19,314.1	17,342.0	15,842.1	15,376.2
Total Farm Debts	3,778.8	3,782.1	3,654.6	3,277.2	3,076.2
Debt/Asset Ratio, Total	18.8	19.6	21.1	20.7	20.0

1/ Source: Economic Indicators of Farm Sector, State Financial Summary, 1987, ERS, USDA, November, 1988.

2/ Includes operator households.

Average Value of Farm Land and Buildings

Date/ Year	California	Idaho	Oregon	Washington	U.S. Average
Dollars Per Acre					
Apr 1, 1982	1,900	839	705	922	823
1983	1,918	814	705	933	788
1984	1,918	814	698	961	782
1985	1,726	749	579	923	679
Feb 1, 1986	1,571	644	521	812	595
1987	1,366	567	479	723	547
1988	1,341	592	466	699	564
1989	1,421	621	466	727	597

Average Value Farm Real Estate Per Acre Percent of Change February 1, 1988-89 February 1, 1989

\$ average values in states and regions
% change from Feb. 1988 to Feb. 1989



FARM LABOR

The number of farm workers in the Pacific region has historically peaked in July. This held true in 1989. The number of farm workers in July 1989 was the highest of the year and was 3% higher than the number of workers for July 1988. Wage rates were generally higher in April and July 1989 than those quarters a year earlier, however with the January quarter reinstated, wages in January 1989 were the highest of the year. Hours per hired worker was up 13% in July 1989 from July 1988.

Wage Rates and Hours Worked, Pacific Region 1/

Year and Month	Hours Worked	Wage Rates			
		Field	Livestock	Field and Livestock	Composite Hourly Rate 2/
	Hours	Dollars per Hour			
1987					
April	39.9	4.89	5.14	4.93	4.93
July	42.6	4.90	5.37	4.94	4.96
October	41.0	6.11	5.56	6.04	5.40
1988					
April	41.2	5.01	5.42	5.08	5.18
July	36.7	4.60	5.32	4.68	4.67
October	41.0	6.11	5.56	6.04	5.40
1989					
January 3/	38.4	5.50	6.04	5.68	6.12
April	38.1	5.15	5.86	5.25	5.52
July	41.7	4.71	6.02	4.86	5.18

Number of Workers

Year and Month	Washington		Pacific Region 1/	
	Hired	All	Hired	All
1,000 Workers				
1984				
July	46	78	93	159
October	40	60	61	170
1985				
April 3/	-	-	52	105
July	-	-	86	147
October	-	-	54	102
1986				
April	-	-	39	87
July	-	-	103	185
October	-	-	43	110
1987				
April	-	-	45	120
July	-	-	87	150
October	-	-	58	107
1988				
April	-	-	46	98
July	-	-	108	180
October	-	-	58	116
1989				
January 3/	-	-	30	84
April	-	-	57	128
July	-	-	96	186

1/ The USDA stopped publishing data by state in 1984. After that, data were published by region with Washington and Oregon forming the Pacific Region.

2/ Includes all workers and all methods of pay except those workers paid by piece rate.

3/ The April Farm Labor report was dropped in 1981 and reinstated in 1985. The January Farm Labor report was dropped in 1981 and reinstated in 1989.

FLORICULTURE

The total wholesale value of floriculture crops in Washington fell to \$39.6 million in 1988, down 10 percent from 1987. Washington growers used more area to produce these crops in 1988 than in 1987. They used 7.0 million square feet of covered area and 1,870 acres of open ground to produce floriculture crops in 1988.

The open ground was used to produce cut flowers consisting mainly of tulips, daffodils, and irises. Total wholesale value of other cut flowers fell 20 percent from 1987 to \$8.4 million.

Pots of other flowering and foliage type bedding plants were grown on 4.6 million square feet of covered area with a total wholesale value of \$5.3 million.

Floriculture crops data for 1986 and earlier years are not comparable with 1987 and 1988 data because of program modifications and increasing coverage of the floriculture industry universe over this time.

Significant revisions were made to the 1987 data, based upon the increased coverage in the 1988 survey. Comparisons of 1987 and 1988 data can be made.

The use of a Census Bureau questionnaire that was designed for both the "Horticulture Specialties" and "Floriculture Crops" surveys may also have caused some differences in comparability of the data reported.

Please see table footnotes for specific changes.

Growers, Growing Area, and Value of Sales

Year	Total Number of Growers	Covered Greenhouses			Total Greenhouse Cover
		Glass	Fiberglass	Film Plastic	
	1,000 Square Feet				
1986	119		2,237 1/	2,205	4,442
1987	139	2,525 2/	962	2,815	6,302
1988	137	2,497	917	3,371	6,785
Year	Shade and Temporary Cover	Total Covered Area	Open Ground	Total Wholesale Value Of Floriculture Crops	
	1,000 Square Feet		Acres	\$1,000	
1986	43	4,485	2,030	35,462	
1987	175	6,477	1,510	43,818	
1988	251	7,036	1,870	39,611	

1/ Glass greenhouses included in fiberglass and other rigid greenhouses.

2/ Estimate started with 1987 crop.

Production, Sales, and Price

Item	Unit	Producers			Area in Production			Quantity Sold		
		1986	1987	1988	1986	1987	1988	1986	1987	1988
		Number			1,000 Square Feet			1,000 Units		
Cut Hybrid Tea Roses	Blooms	4	5	6	133	133	134	1,303	1,334	1,520
Chrysanthemums:										
Standard	Blooms	6	6	6	17	16	14	39	43	36
Pompon	Bunches	9	7	8	66	66	89	75	63	79
Potted	Pots	9	14	15	48	58	56	98	96	97
Hardy Garden	Pots	38	49	55	495	597	787	694	694	903
Other Cut Flowers		19	20	20	55,312	54,620	55,822	-	-	-
Other Potted Flowering	Pots	21	36	58	396	860	1,193	618	2,063	2,346
Geraniums:										
Bedding Plants	Flats	21	14	15	131	81	68	109	50	42
Potted, Cuttings	Pots	72	83	84	653	602	763	1,992	1,812	2,037
Potted, Seed	Pots	32	38	41	133	280	422	514	844	1,163
Hanging Baskets:										
Foliage	Baskets	25	36	30	-	-	-	243	283	228
Flowering	Baskets	78	97	106	-	-	-	257	312	346
Bedding Plants:										
Other Flowering and Foliage Type	Flats	71	91	88	1,453	1,425	1,217	877	913	702
Other Flowering and Foliage Type	Pots	39	73	86	849	4,524	4,593	3,727	7,956	7,463
Vegetable Type 1/	Flats	57	72	66	289	303	202	174	190	109
Vegetable Type 1/	Pots	34	55	55	214	323	348	645	954	704
Easter Lilies	Pots	13	12	15	89	71	64	154	130	115
Poinsettia	Pots	52	61	66	1,294	1,558	1,623	932	1,066	1,171

1/ Does not include vegetable transplants grown for use in commercial vegetable production.

- Data not collected.

Production, Sales, and Price (continued)

Item	Unit	Value of Sales at Wholesale 1/			Percent of Sales at Wholesale			Wholesale Price		
		1986	1987	1988	1986	1987	1988	1986	1987	1988
		\$1,000			Percent			Dollars/Unit		
Cut Hybrid Tea Roses	Blooms	678	920	1,094	99	98	98	.52	.69	.72
Chrysanthemums:										
Standard	Blooms	31	32	23	83	85	82	.79	.74	.65
Pompon	Bunches	146	154	184	90	83	75	1.95	2.45	2.33
Potted	Pots	394	400	310	93	91	94	4.02	4.17	3.20
Hardy Garden 3/	Pots	743	745	907	83	95	95	1.07	1.07	1.00
Other Cut Flowers		8,297	10,410	8,353	95	95	94	-	-	-
Other Potted Flowering	Pots	1,267	2,598	2,294	90	81	93	2.05	1.26	.98
Geraniums:										
Bedding Plants	Flats	519	255	228	92	80	88	4.76	5.10	5.42
Potted, Cuttings 3/	Pots	2,530	2,366	2,496	63	75	82	1.27	1.31	1.23
Potted, Seed 3/	Pots	524	587	838	54	92	97	1.02	.70	.72
Hanging Baskets:										
Foliage	Baskets	887	1,124	905	97	94	96	3.65	3.97	3.97
Flowering	Baskets	2,408	2,973	3,408	93	88	90	9.37	9.53	9.85
Bedding Plants:										
Other Flowering and Foliage Type	Flats	5,964	5,916	4,549	87	85	81	6.80	6.48	6.48
Other Flowering and Foliage Type 3/	Pots	3,019	6,047	5,300	91	94	94	.81	.76	.71
Vegetable Type 2/	Flats	1,302	1,210	727	88	84	84	7.48	6.37	6.67
Vegetable Type 2/ 3/	Pots	387	797	500	93	83	73	.60	.84	.71
Easter Lilies	Pots	531	499	459	95	93	92	3.45	3.84	3.99
Poinsettia	Pots	3,542	3,535	3,996	80	89	92	3.80	3.31	3.41

1/ Equivalent wholesale value of all sales.

2/ Does not include vegetable transplants grown for use in commercial vegetable production.

3/ Wholesale price is weighted average value of pots less than 5 inches, and pots greater than 5 inches.

- Data not collected.

EXPORTS

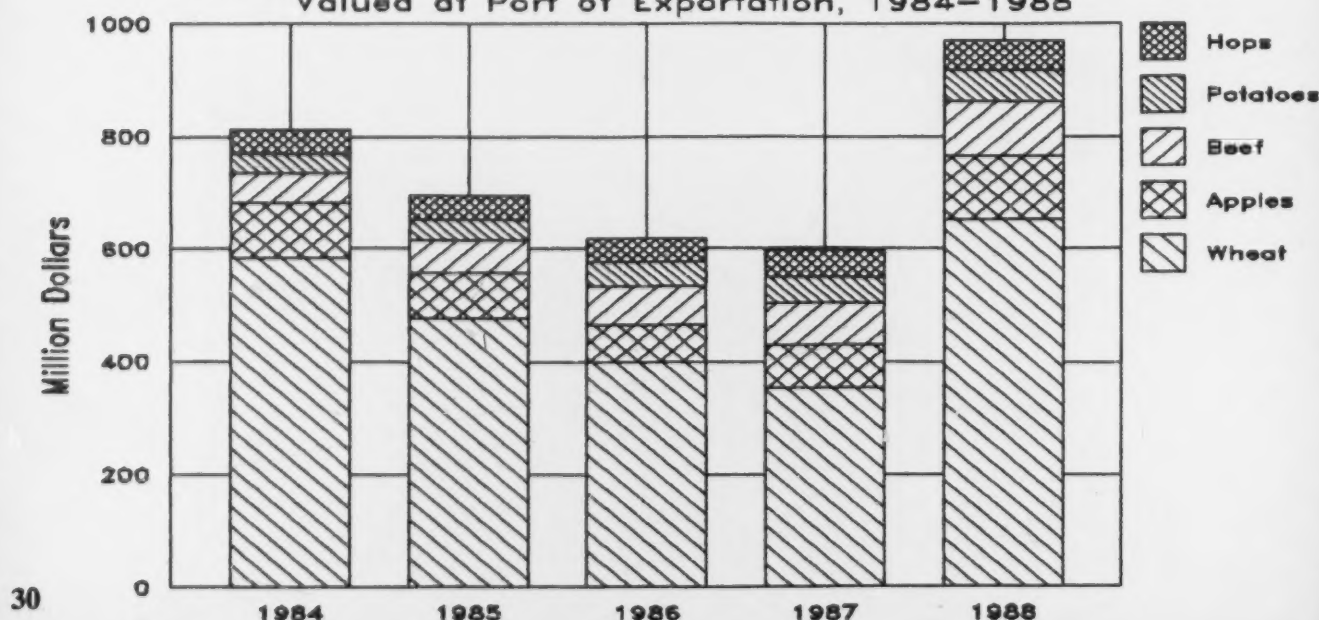
The port values for Washington and U.S. 1988 agricultural exports gained significantly over the previous year. Washington's agricultural exports totaled \$1.33 billion at port of embarkation, 4% of the U.S. total, and the highest level since the Washington Agricultural Statistics Service began the exports estimates program in 1984. U.S. agricultural exports for 1988 totaled \$37.1 billion, 30% more than 1987, whereas Washington's agricultural exports showed a 47% increase over a year ago. Values at port of exportation, or embarkation, are based on port declarations, and include port charges, insurance and freight (C.I.F.).

Wheat, Washington's #1 commodity, made a very strong comeback in 1988, accounting for 49% of the State's agricultural exports. Wheat exports, which have shown, on a value basis, a steady decline since 1984, were 84% higher than in 1987, as well as, 11% above 1984. The gains made by wheat exports were due to increased volume, as well as, stronger prices.

Washington's #2 export commodity, apples, also came on strong in 1988. With a port value of \$112 million, apple exports were up 51% from a year ago, with an 8% share of the State's total agricultural exports. Beef cattle and products, which have shown steady increases since 1984, retained the #3 spot in 1988. The port value of beef exports, \$52 million, was 33% more than last year, and 7% of Washington's total agricultural exports. Potatoes, Washington's #4 export commodity, have also shown steady progress since 1984. With \$56 million exported in 1988, potatoes gained a position on hops, which dropped to the #5 spot. However, 1988 was still a good year for hops exports, with a port value of \$52 million, 9% higher than the previous year.

Hay and dairy exports gained significantly in 1988, with both moving up three positions to #6 and #7, respectively. The port value of hay exports totaled \$50 million, up 59% from 1987, whereas dairy exports totaled \$36 million, an increase of 79%. Seed crops gained 10% on a year ago, and maintained the #8 spot. Sweet corn, the #9 export commodity for Washington, broke into the top ten for the first time in five years, with a port value of \$26 million, 34% more than last year. Rounding out the top ten were sweet cherries. With \$24 million exported, sweet cherries were the only top ten commodity to lose ground with respect to Washington's 1987 agricultural exports.

Washington's Leading Agricultural Exports
Valued at Port of Exportation, 1984-1988



**Washington's Leading Agricultural Exports Valued at Port of Exportation,
Calendar years 1984-1988.**

Commodity	Rank 1988	Value					1988 as a Percent of 1987
		1984	1985	1986	1987	1988	
		\$,000					
Wheat	1	583,424	477,306	399,810	354,533	651,710	184
Apples 1/	2	99,047	81,429	66,229	74,394	112,256	151
Beef Cattle & Products	3	53,854	57,959	67,068	73,739	98,085	133
Potatoes	4	34,438	35,641	43,410	47,472	55,549	117
Hops	5	41,911	42,959	42,044	47,502	51,792	109
All Hay (excl straw)	6	22,626	21,053	30,300	31,216	49,775	159
Dairy Cattle & Products	7	34,264	34,646	30,819	20,399	36,493	179
All Seeds	8	30,101	26,197	30,957	31,718	35,013	110
Sweet Corn	9	11,104	11,662	14,875	19,471	26,055	134
Sweet Cherries	10	9,656	7,472	14,863	32,255	24,130	75
Barley	11	38,078	16,176	25,589	41,889	21,703	52
Dry Peas	12	21,237	22,502	17,441	14,546	21,158	145
Mint Oil	13	14,088	16,618	17,640	16,097	20,993	130
Grapes	14	6,746	7,544	8,228	14,692	20,166	137
Nursery Products	15	8,498	7,993	9,530	10,238	15,074	147
Asparagus	16	10,209	8,677	4,696	11,609	12,194	105
Pears	17	9,493	8,340	10,461	8,699	11,629	134
Lentils	18	11,600	19,093	20,988	9,029	11,408	126
Onions	19	8,983	3,245	3,837	4,348	7,558	174
Green Peas, Processed	20	2,715	2,377	4,034	3,749	5,195	139
Dry Beans	21	4,419	4,138	2,988	2,070	3,213	155
Poultry	22	3,621	3,329	3,449	2,183	3,043	139
Carrots	23	1,599	852	1,173	1,073	2,968	277
Peaches & Nectarines	24	954	711	1,506	1,249	2,529	202
Prunes & Plums	25	1,456	1,355	1,656	939	1,978	211
Cauliflower	26	665	599	855	1,010	824	82
Other Commodities		18,905	18,024	24,595	29,211	31,913	109
Washington Total		1,083,691	937,897	899,041	905,330	1,334,404	147
U.S. Exports		37,804,000	29,026,000	26,221,675	28,637,355	37,093,000	130

1/ Includes value of fresh shipments, dried apples, and apple juice.

ANNUAL EXPORTS BY COUNTRY U.S. AND NORTHWEST PORT DISTRICT TOTALS /1

COUNTRY	U.S. RANK				U.S. PORTS-VALUE				NW PORTS-VALUE				NW & OF U.S.			
	1985	1986	1987	1988	1985	1986	1987	1988	1985	1986	1987	1988	1985	1986	1987	1988
JAPAN	1	1	1	1	5,705,569	5,629,674	6,325,110	8,980,215	1,518,688	1,467,949	1,543,037	2,295,320	26.62	26.08	24.40	25.56
SOUTH KOREA	6	4	3	2	1,429,610	1,306,945	1,859,520	2,287,374	623,154	619,076	743,849	970,950	43.59	47.37	40.00	42.45
TAIWAN	7	5	5	7	1,158,736	1,115,373	1,257,215	1,625,139	548,422	445,400	385,057	752,561	47.33	39.93	30.63	46.31
CANADA	5	3	4	6	1,479,493	1,439,910	1,715,614	1,876,576	262,127	282,052	308,949	355,558	17.72	19.59	18.01	18.95
EGYPT	8	8	9	11	788,814	720,402	662,058	816,953	62,278	32,219	148,987	292,808	7.90	4.47	22.50	35.84
INDIA	-	-	-	22	-	-	-	383,804	-	-	-	163,701	-	-	-	42.65
PHILIPPINES	24	24	25	24	232,116	195,998	200,269	314,696	133,474	100,434	108,403	151,907	57.50	51.24	52.05	48.27
PAKISTAN	23	23	-	20	248,720	220,370	-	386,996	54,026	80,054	-	122,419	-	36.33	-	31.63
U.K.	13	9	11	10	530,159	667,264	640,199	863,333	59,946	89,646	77,997	90,962	11.31	13.43	12.18	10.54
HONG KONG	21	19	18	18	288,462	302,867	369,124	430,157	53,096	59,588	79,054	73,760	18.41	19.67	21.42	17.15
CHINA	-	-	19	13	-	-	360,100	756,960	-	-	139,831	66,225	-	-	38.83	8.75
MEXICO	4	6	6	3	1,650,909	1,064,523	1,176,740	2,185,542	21,854	6,480	9,882	58,322	1.32	0.61	0.84	2.67
SAUDI ARABIA	18	16	16	19	309,997	351,107	448,133	388,146	17,748	107,421	216,014	55,095	5.73	30.59	48.20	14.19
FRANCE	16	14	13	16	394,313	449,521	563,272	77,011	26,876	42,720	56,034	41,363	6.82	9.50	9.95	7.17
WEST GERMANY	9	7	7	8	704,711	820,084	1,098,436	1,179,587	15,950	23,105	24,555	32,840	2.26	2.82	2.24	2.78
U.S.S.R.	2	12	8	4	1,656,991	647,463	922,976	2,163,294	-	-	1,207	28,981	-	-	0.13	1.34
NETHERLANDS	3	2	2	5	1,781,185	1,967,523	1,872,159	1,963,680	18,537	29,596	30,661	22,777	1.04	1.50	1.64	1.16
IRAQ	19	18	14	12	304,553	324,341	489,127	802,193	6,503	182	550	11,138	2.14	0.06	0.11	1.39
ITALY	12	10	10	14	585,116	661,038	646,877	698,216	8,153	10,802	8,918	9,078	1.39	1.63	1.38	1.30
SPAIN	10	11	12	9	627,453	649,447	600,804	882,872	5,039	9,169	7,192	8,787	0.80	1.41	1.20	1.00
BELGIUM	17	17	17	21	351,695	349,019	417,789	385,818	6,702	9,087	11,739	7,963	1.91	2.60	2.81	2.06
ISRAEL	22	22	23	23	264,581	246,409	259,412	324,659	4	136	348	2,838	-	0.06	0.13	0.87
ALGERIA	25	21	20	17	217,638	279,783	301,623	563,556	-	-	-	2,138	-	-	-	0.38
PORTUGAL	15	20	21	25	429,364	291,909	274,228	299,079	-	84	1,809	860	0.02	0.03	0.66	0.29
VENEZUELA	11	15	15	15	624,404	437,604	475,564	653,166	4,024	2,067	3,611	-	0.64	0.47	0.76	-
BRAZIL	14	13	22	-	464,889	547,495	264,839	-	9,073	16,557	11,131	-	1.95	3.02	4.20	-
NIGERIA	20	-	-	-	302,389	-	-	-	60	-	-	-	-	-	0.01	-
MOROCCO	-	-	24	-	-	-	211,486	-	-	-	26	-	-	-	-	-
INDONESIA	-	25	-	-	-	175,504	-	-	-	60,839	-	-	-	34.67	-	-
TOTAL	25	25	25	25	22,531,867	21,027,856	23,420,674	31,799,022	3,455,812	3,494,676	3,918,841	5,618,351	15.34	16.62	16.73	17.67

/1 COUNTRIES ARRANGED IN DESCENDING ORDER BY NW RANK FOR 1988.

TOP RANKED EXPORT COMMODITIES BY COUNTRY, U.S. PORT DISTRICT TOTALS, 1988

COUNTRY	U.S. RANK 1988	1988 PORT VALUES		#1 COMMODITY	VALUE \$	#	#2 COMMODITY	VALUE \$	#	#3 COMMODITY	VALUE \$	#
		U.S.	HW									
		\$ 1,000										
JAPAN	1	8,980,215	2,295,320	CORN, YELLOW, N/DONATED	1,598,715	18	SOYBEANS	\$1,000	11	BEEF, CRCS, W/O BONE, FR	\$1,000	9
KOREA REPUBLIC	2	2,287,374	970,950	HIDES, CATTLE, WHOLE	636,864	28	CORN, YELLOW, N/DONATED	1,027,231	19	COTTON, N/CRD, 1-1 1/8 IN	765,503	18
MEXICO	3	2,185,542	58,322	CORN, YELLOW, N/DONATED	354,072	16	SOYBEANS	428,859	16	GRAIN SORGHUM, EX SEED	401,241	16
U.S.S.R.	4	2,163,294	28,981	CORN, YELLOW, N/DONATED	856,082	41	WHEAT, N/DONATED	346,932	16	SOYBEAN, OILCAKE, MEAL	134,693	16
NETHERLANDS	5	1,963,680	22,777	SOYBEANS	851,818	43	CORN GLUTEN FEED	275,956	35	FEED, CORN PRODUCTS, NSPF	246,260	11
CANADA	6	1,876,576	355,558	SOYBEAN, OILCAKE, MEAL	181,919	3	GRAPES, FRESH	64,154	14	FEED, CORN PRODUCTS, NSPF	125,270	6
CHINA T	7	1,625,139	752,561	SOYBEANS	476,362	29	CORN, YELLOW, N/DONATED	461,277	28	BEEF, CRCS, W/O BONE, FR	52,522	3
FR GERMANY	8	1,179,587	32,840	SOYBEANS	235,599	20	TBCO, FILL, CIG, FLUE, STEM	136,931	12	HIDES, CATTLE, WHOLE	156,937	10
SPAIN	9	882,872	8,787	SOYBEANS	294,065	33	CORN, YELLOW, N/DONATED	231,746	26	ALMONDS, SHELLED	120,180	10
U.K.	10	863,333	90,962	SOYBEANS	143,807	17	MULES, BURGOS, ETC	84,568	26	CORN GLUTEN FEED	37,339	4
EGYPT	11	816,953	292,808	WHEAT, N/DONATED	362,917	44	WHEAT, FLOUR, NSPF, N/DON	113,711	14	TBCO, FILL, CIG, FLUE, STEM	41,986	5
IRAQ	12	802,193	11,138	HD RICE, LONG, N/PRB, N/DON	181,118	23	WHEAT, N/DONATED	112,086	14	CORN, YELLOW, N/DONATED	92,765	11
CHINA M	13	756,960	66,225	WHEAT, N/DONATED	697,838	92	COTTON, N/CRD, 1-1 1/8 IN	25,181	14	FEED, POULTRY, PREP	92,572	12
ITALY	14	698,216	9,078	SOYBEAN, OILCAKE, MEAL	124,196	18	COTTON, N/CRD, 1-1 1/8 IN	101,228	14	HIDES, CATTLE, WHOLE	6,214	1
VENEZUELA	15	653,166	0	SOYBEAN, OILCAKE, MEAL	229,659	35	GRAIN SORGHUM, EX SEED	170,956	26	WHEAT, N/DONATED	51,786	7
FRANCE	16	577,011	41,363	SOYBEANS	60,523	10	CORN GLUTEN FEED	48,556	20	WHEAT, N/DONATED	72,228	11
ALGERIA	17	563,556	2,138	WHEAT, N/DONATED	173,901	31	SOYBEAN, N/CRD, 1-1 1/8 IN	110,682	8	HORSEMEAT, CRCS, FR, FZN	38,093	7
HONG KONG	18	430,157	73,760	CHICKENS, PC, FR, CHLD, FZN	45,464	11	ORANGES, OTHER, FRESH	39,926	20	CORN, YELLOW, N/DONATED	109,504	19
SAUDI ARABIA	19	388,146	55,095	HD RICE, LONG, PRB, N/DON	99,095	26	CORN, YELLOW, N/DONATED	61,109	16	TBCO, FILL, CIG, FLUE, STEM	33,874	8
PAKISTAN	20	386,996	122,419	OIL, SOYBEAN, CRUDE	233,491	60	WHEAT, N/DONATED	124,488	32	SOYBEAN, OILCAKE, MEAL	44,736	12
BELGIUM	21	385,818	7,963	SOYBEANS	143,030	37	HD RICE, LONG, PRB, N/DON	36,841	10	TALLOW, INEDIBLE	20,568	5
INDIA	22	383,804	163,701	WHEAT, N/DONATED	221,036	58	OIL, SOYBEAN, CRUDE	53,640	14	HORSEMEAT, CRCS, FR, FZN	32,093	8
ISRAEL	23	324,659	2,838	SOYBEANS	128,455	40	WHEAT, N/DONATED	55,226	17	CORN, YELLOW, N/DONATED	22,222	6
PHILIPPINES R	24	314,696	151,907	WHEAT, N/DONATED	118,281	38	HD RICE, MED, N/PRB, N/DON	31,940	10	CORN, YELLOW, N/DONATED	25,536	11
PORTUGAL	25	299,079	860	SOYBEANS	94,194	31	CORN GLUTEN FEED	72,612	24	CORN, YELLOW, N/DONATED	50,164	17
		\$ 1,000										
JAPAN	1	8,980,215	2,295,320	SALMON, SOCKEYE (RED)	484,424	5	COTTON, N/CRD, 1-1 1/8 IN	\$1,000	5	WHEAT, N/DONATED	\$1,000	5
KOREA REPUBLIC	2	2,287,374	970,950	WHEAT, N/DONATED	286,127	13	SOYBEANS	427,511	11	COTTON, OTH, N/CRD, 1 1/8 IN	425,510	2
MEXICO	3	2,185,542	58,322	MILK, NONFAT DRY, N/DON	101,736	5	SOYBEAN, OILCAKE, MEAL	259,473	2	CATTLE, OTHER, N/BRED	35,255	2
U.S.S.R.	4	2,163,294	28,981	SOYBEANS	157,879	6	ALMONDS, SHELLED	101,459	2	COTTON, N/CRD, 1-1 1/8 IN	95,537	4
NETHERLANDS	5	1,963,680	22,777	SOYBEAN, OILCAKE, MEAL	121,273	6	TBCO, FILL, CIG, FLUE, STEM	46,848	2	FEED, LIVESTOCK, NSPF, PREP	31,033	1
CANADA	6	1,876,576	355,558	ORANGES, OTHER, FRESH	47,639	3	TOMATOES, FR, CHLD	43,109	2	COTTON, N/CRD, 1-1 1/8 IN	39,783	2
CHINA T	7	1,625,139	752,561	WHEAT, N/DONATED	128,345	8	TBCO, FILL, CIG, FLUE, STEM	44,187	2	COTTON, N/CRD, 1-1 1/8 IN	42,285	2
FR GERMANY	8	1,179,587	32,840	TBCO, FILL, CIG, BURL, STEM	73,526	6	COTTON, N/CRD, 1-1 1/8 IN	49,794	3	COTTON, N/CRD, 1-1 1/8 IN	42,759	3
SPAIN	9	882,872	8,787	TBCO, STEMS, SCRAPS, ETC	37,147	4	GRAIN SORGHUM, EX SEED	59,577	5	FEED, CORN PRODUCTS, NSPF	45,959	4
U.K.	10	863,333	90,962	ALMONDS, SHELLED	30,610	4	DRY BEANS, NAVY OR PEA	25,424	3	TALLOW, INEDIBLE	21,554	2
EGYPT	11	816,953	292,808	TALLOW, INEDIBLE	55,933	7	CORN GLUTEN FEED	29,860	3	CORN GLUTEN FEED	29,808	3
IRAQ	12	802,193	11,138	SOYBEAN, OILCAKE, MEAL	74,100	9	SOYBEAN, OILCAKE, MEAL	53,727	3	COTTON, N/CRD, 1-1 1/8 IN	34,191	4
CHINA M	13	756,960	66,225	CHICKENS, BREED, BROILER	5,810	9	CORN, YELLOW, N/DONATED	71,900	9	COTTON, N/CRD, 1-1 1/8 IN	38,180	5
ITALY	14	698,216	9,078	CORN GLUTEN FEED	34,057	5	TBCO, STEMS, SCRAPS, ETC	3,671	0	INTESTINES, HOG	3,142	0
VENEZUELA	15	653,166	0	SOYBEANS	36,948	6	SOYBEANS	31,162	4	TBCO, FILL, CIG, FLUE, STEM	29,943	4
FRANCE	16	577,011	41,363	MULES, BURGOS, ETC	35,394	6	OIL, COTTONSEED, ONCE REF	23,598	4	TALLOW, INEDIBLE	19,016	3
ALGERIA	17	563,556	2,138	BARLEY, EX MALTING	39,886	7	ALMONDS, SHELLED	29,617	5	GRAPEFRUIT, FRESH	27,153	5
HONG KONG	18	430,157	73,760	WHEAT, N/DONATED	18,217	7	OIL, SUNFLOWER SEED	31,762	6	COTTON, N/CRD, 1-1 1/8 IN	17,287	3
SAUDI ARABIA	19	388,146	55,095	BARLEY, EX MALTING	44,643	4	TBCO, FILL, CIG, BURL, STEM	17,429	6	COTTON, N/CRD, 1-1 1/8 IN	17,379	4
PAKISTAN	20	386,996	122,419	TBCO, FILL, CIG, FLUE, STEM	1,924	12	CHICKENS, BREED, BROILER	38,199	10	FURSKINS, MINK, WHL, DRESSED	16,529	4
BELGIUM	21	385,818	7,963	WHEAT, N/DONATED	27,601	7	WHEAT, N/DONATED	930	0	WHEAT, DONATED	727	0
INDIA	22	383,804	163,701	OIL, SOYBEAN, REF, DON	17,568	7	CORN, YELLOW, N/DONATED	15,940	4	COTTON, N/CRD, 1-1 1/8 IN	13,041	3
ISRAEL	23	324,659	2,838	GRAIN SORGHUM, EX SEED	33,550	10	BARLEY, EX MALTING	11,879	3	ALMONDS, N/SHELLED	10,883	3
PHILIPPINES R	24	314,696	151,907	MILK, NONFAT DRY, DON	24,118	8	COTTON, N/CRD, 1-1 1/8 IN	8,727	7	ALMONDS, SHELLED	3,917	1
PORTUGAL	25	299,079	860	FEED, LIVESTOCK, NSPF, PREP	15,898	5	COTTON, N/CRD, 1-1 1/8 IN	20,860	7	TBCO, FILL, CIG, BURL, STEM	15,162	5
										COD, DRIED, SKIN, ETC	9,644	3

Usual Planting and Harvesting Dates, Washington

Crop	Usual Planting Dates	Usual Harvesting Dates		
		Begin	Most Active	End
Fall Barley	Sep 1-Nov 10	Jul 5	Jul 15-Aug 10	Aug 20
Spring Barley	Mar 1-May 15	Jul 15	Jul 25-Aug 25	Sep 15
Dry Beans	May 1-Jun 10	Aug 20	Sep 5-Sep 30	Nov 1
Lentils	Apr 10-May 10	Jul 15	Jul 25-Aug 25	Sep 1
Dry Peas	Apr 5-May 1	Jul 15	Jul 25-Aug 25	Sep 1
Grain Corn	Apr 5-May 20	Oct 15	Oct 25-Nov 20	Dec 15
Silage Corn	Apr 5-May 20	Sep 1	Sep 5-Oct 5	Oct 15
Alfalfa Hay		May 25		Oct 15
Other Hay		May 25		Sep 15
Oats	Mar 10-Apr 10	Jul 15	Aug 1-Aug 25	Sep 10
Winter Wheat	Aug 15-Nov 20	Jul 10	Jul 25-Aug 25	Sep 20
Spring Wheat	Mar 1-May 15	Jul 15	Jul 25-Aug 20	Sep 30
Asparagus (F)		Apr 10	May 5-Jun 5	Jun 21
Snap Beans (P)	May 10-Jun 21	Jul 20	Aug 5-Sep 1	Oct 1
Carrots (F)	Apr 15-Jul 30	Jul 30	Sep 1-Nov 1	Dec 31
Carrots (P)	Apr 15-Jul 30	Jul 30	Sep 1-Nov 1	Dec 31
Sweet Corn (F)	Apr 15-Jun 5	Jul 25	Aug 1-Sep 20	Sep 30
Sweet Corn (P)	Apr 10-Jun 25	Aug 20	Sep 1-Oct 5	Oct 20
Lettuce (F)	Mar 24-Aug 15	Jun 25	Sep 10-Nov 1	Nov 15
Onions	Transplant:			
Non-storage--Fall	Oct 15-Dec 10	Jul 5	Jul 20-Aug 5	Aug 15
--Spring	Mar 20-Apr 5	Jun 20	Jul 5-Aug 1	Sep 1
Storage	Mar 25-Apr 15	Sep 10	Sep 15-Oct 5	Oct 20
Green Peas (P)	Apr 1-Jun 20	Jun 15	Jun 25-Aug 15	Aug 31

Crop	Usual Dates of Full Bloom	Usual Harvesting Dates		
		Begin	Most Active	End
Cultivated Blackberries	Jun 15-Jul 10	Jul 10	Aug 15-Sep 20	Oct 10
Blueberries	May 10-May 15	Jul 5	Aug 5-Sep 15	Oct 5
Cranberries	Jun 10-Jun 15	Oct 1	Oct 5-Oct 10	Nov 1
Currants	Apr 1-Apr 5	Jul 5	Jul 10-Jul 20	Jul 25
Raspberries	May 10-May 15	Jun 25	Jul 15-Jul 20	Aug 15
Strawberries	Apr 10-May 15	Jun 10	Jun 25-Jul 5	Jul 20
Apples	Apr 5-May 10	Aug 10	Sep 5-Oct 25	Nov 1
Apricots	Mar 20-Apr 5	Jun 25	Jul 5-Jul 25	Aug 1
Sweet Cherries	Apr 10-Apr 25	Jun 10	Jun 15-Jul 15	Jul 20
Grapes	May 25-Jul 10	Sep 15	Sep 15-Oct 20	Oct 20
Peaches	Apr 10-Apr 20	Jul 10	Aug 10-Sep 10	Sep 20
Bartlett Pears	Apr 5-May 5	Aug 10	Aug 15-Sep 10	Sep 20
Other Pears	Apr 5-May 5	Sep 5	Sep 20-Oct 20	Nov 1
Prunes	Apr 15-Apr 20	Aug 10	Aug 20-Sep 5	Oct 1

(F)=Fresh market
(P)=Processing market

FIELD CROPS

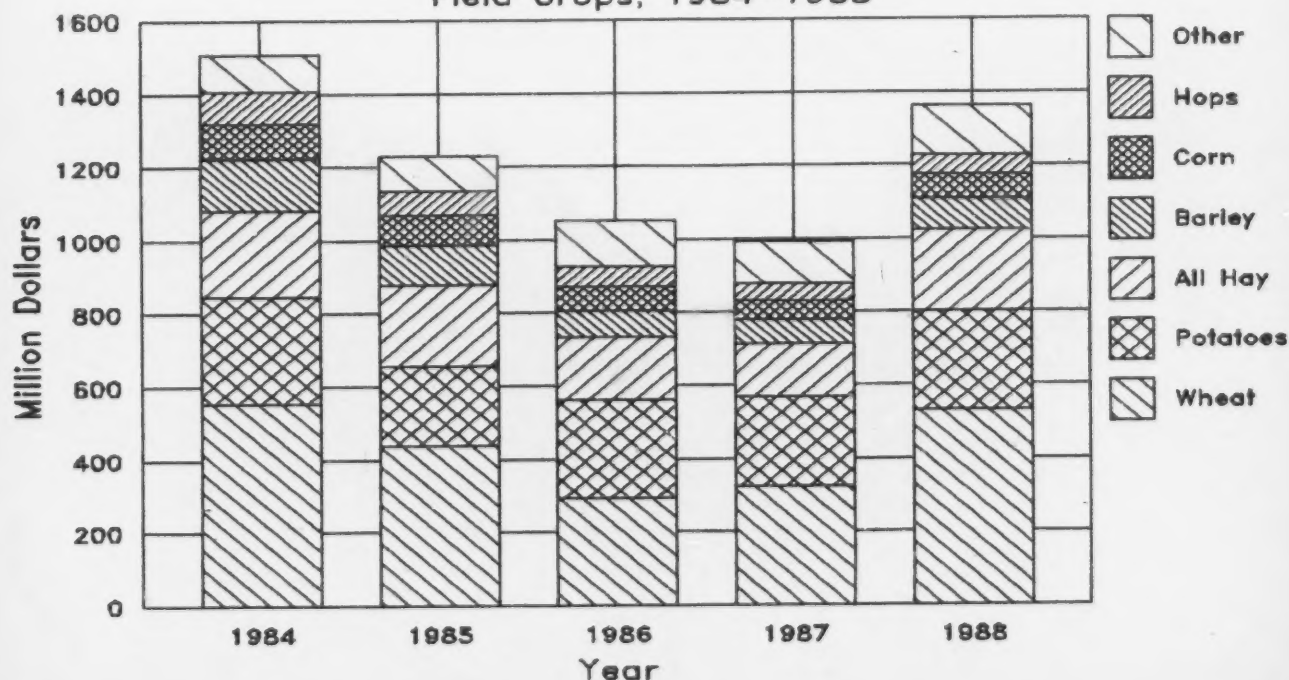
Fall seeding of crops was in progress the last week of August 1987. Seeding of winter wheat was 30% complete on September 6th, 9 points ahead of the five-year average. Soil moisture conditions became short the last week of September, causing seeding of winter wheat to fall behind schedule. Cool temperatures slowed emergence and winter wheat was 56% emerged on October 11, 4 points behind the five-year average. By November 22nd, winter wheat was 89% emerged, 9 points behind the average.

Rain and mild temperatures in many areas of the State during the first week of December relieved some of the drought stress the fall seeded crops were suffering. During the third week of December, snow and colder temperatures slowed fieldwork. Snow cover through the winter was adequate in most areas protecting winter cereals from freeze injury.

Spring fieldwork began in late February. By March, weather conditions were such that cooler temperatures slowed spring planting in the eastern part of the State. On April 3rd, seeding of spring wheat was 45% complete and barley seeding was 33% complete, which were near the five-year averages for that date. Wheat and barley conditions were mostly good to fair throughout the spring and improved during the summer. Seeding of corn began the first week of April and continued through the end of May.

Alfalfa hay harvest began the second week of May, as temperatures began to warm to above normal across most of the State. Winter wheat harvest began in the early areas during the first half of July. Early potato harvest was underway the second week of July as was second cutting of alfalfa hay. By mid-August, third cutting of hay was in progress and winter wheat was 72% harvested, 3 points ahead of the five-year average. By the end of August, harvest of winter and spring wheat was near complete. Potato harvest neared completion in early November, while corn for grain harvest continued into December.

Value of Production
Field Crops, 1984-1988



Field Crop Acreage, Production, Price, and Value

Crop and Year	Acreage		Yield Per Acre	Unit	Production	Average Price Per Unit	Value of Production
	Planted	Harvested					
	1,000 Acres				1,000 Units	Dollars	1,000 Dollars
Wheat, Winter							
1984	2,600	2,400	62.0	Bu.	148,800	-	-
1985	2,550	2,400	48.0	Bu.	115,200	-	-
1986	2,250	2,100	49.0	Bu.	102,900	-	-
1987	1,900	1,825	57.0	Bu.	104,025	-	-
1988	1,850	1,750	62.0	Bu.	108,500	-	-
Wheat, Spring							
1984	220	210	55.0	Bu.	11,550	-	-
1985	300	290	45.0	Bu.	13,050	-	-
1986	320	310	45.0	Bu.	13,950	-	-
1987	200	190	54.0	Bu.	10,260	-	-
1988	320	310	52.0	Bu.	16,120	-	-
Wheat, All							
1984	2,820	2,610	61.4	Bu.	160,350	3.45	553,208
1985	2,850	2,690	47.7	Bu.	128,250	3.41	437,333
1986	2,570	2,410	48.5	Bu.	116,850	2.51	293,294
1987	2,100	2,015	56.7	Bu.	114,285	2.82	322,284
1988	2,170	2,060	60.5	Bu.	124,620	4.25	529,635
Barley							
1984	1,000	980	65.0	Bu.	63,700	2.25	143,325
1985	1,200	1,180	48.0	Bu.	56,640	1.95	110,448
1986	920	900	50.0	Bu.	45,000	1.67	75,150
1987	660	645	55.0	Bu.	35,475	1.87	66,338
1988	580	560	62.0	Bu.	34,720	2.45	85,064
Oats							
1984	75	30	68.0	Bu.	2,040	1.80	3,672
1985	70	33	65.0	Bu.	2,145	1.50	3,218
1986	70	33	65.0	Bu.	2,145	1.10	2,360
1987	75	35	66.0	Bu.	2,310	1.40	3,234
1988	80	37	67.0	Bu.	2,479	2.10	5,206
Corn for Grain 1/							
1984	200	150	155.0	Bu.	23,250	3.00	69,750
1985	190	135	160.0	Bu.	21,600	2.65	57,240
1986	170	120	170.0	Bu.	20,400	1.80	36,720
1987	120	80	170.0	Bu.	13,600	2.15	29,240
1988	120	80	170.0	Bu.	13,600	3.00	40,800
Corn for Silage							
1984	-	50	23.0	Tons	1,150	23.00	26,450
1985	-	55	22.0	Tons	1,210	22.00	26,620
1986	-	50	24.0	Tons	1,200	22.50	27,000
1987	-	40	25.0	Tons	1,000	22.00	22,000
1988	-	40	25.0	Tons	1,000	24.00	24,000
Dry Beans							
1984	35	34	20.8	Cwt.	707	17.80	12,585
1985	34	33	21.5	Cwt.	710	18.20	12,922
1986	32	31	21.6	Cwt.	670	17.80	11,926
1987	36	35	21.3	Cwt.	746	15.40	11,488
1988	37	36	20.6	Cwt.	742	28.60	21,221
Dry Edible Peas							
1984 2/	-	123.0	14.8	Cwt.	1,820	8.65	15,743
1985 2/	-	85.0	16.6	Cwt.	1,411	9.20	12,981
1986	110.0	109.0	18.4	Cwt.	2,006	9.00	18,054
1987	107.0	106.0	20.0	Cwt.	2,120	7.60	16,112
1988	117.0	116.0	21.4	Cwt.	2,482	8.20	20,352
Lentils							
1984 2/	-	55.0	8.3	Cwt.	457	26.00	11,882
1985 2/	-	84.0	7.5	Cwt.	630	29.00	18,270
1986	113.0	112.0	12.2	Cwt.	1,366	19.50	26,637
1987	98.0	97.0	12.0	Cwt.	1,164	11.00	12,804
1988	49.0	48.0	12.4	Cwt.	595	19.00	11,305

Field Crop Acreage, Production, Price, and Value (continued)

Crop and Year	Acreage		Yield Per Acre	Unit	Production	Average Price Per Unit	Value of Production
	Planted	Harvested					
	1,000 Acres				1,000 Units	Dollars	1,000 Dollars
Potatoes							
1984	116	115	495	Cwt.	56,925	5.15	293,164
1985	127	126	505	Cwt.	63,630	3.45	219,524
1986	119	118	525	Cwt.	61,950	4.30	266,385
1987	124	124	540	Cwt.	66,960	3.65	244,404
1988	115	115	550	Cwt.	63,250	4.50	284,625
Hops							
1984	-	22.7	1,920	Lbs.	43,584	1.99	86,732
1985	-	19.5	1,870	Lbs.	36,465	1.80	65,637
1986	-	17.4	2,040	Lbs.	35,496	1.59	56,439
1987	-	20.1	1,860	Lbs.	37,398	1.32	49,365
1988	-	23.1	1,720	Lbs.	39,751	1.36	54,061
Alfalfa Hay							
1984	-	475	4.3	Tons	2,043	-	-
1985	-	450	3.9	Tons	1,755	-	-
1986	-	470	4.2	Tons	1,974	-	-
1987	-	460	4.3	Tons	1,978	-	-
1988	-	490	4.2	Tons	2,058	-	-
Other Hay							
1984	-	325	2.7	Tons	878	-	-
1985	-	350	2.4	Tons	840	-	-
1986	-	360	2.5	Tons	900	-	-
1987	-	300	2.4	Tons	720	-	-
1988	-	310	2.5	Tons	775	-	-
All Hay							
1984	-	800	3.65	Tons	2,921	80.50	235,141
1985	-	800	3.24	Tons	2,595	84.50	219,278
1986	-	830	3.46	Tons	2,874	60.00	172,440
1987	-	760	3.55	Tons	2,698	54.50	147,041
1988	-	800	3.54	Tons	2,833	78.50	222,391
Peppermint							
1984	-	12.4	84	Lbs.	1,042	10.10	10,524
1985	-	13.2	87	Lbs.	1,148	8.30	9,528
1986	-	10.9	89	Lbs.	970	8.35	8,100
1987	-	11.5	87	Lbs.	1,001	10.40	10,410
1988	-	16.5	86	Lbs.	1,419	14.10	20,008
Spearmint							
1984	-	11.3	111	Lbs.	1,254	11.70	14,672
1985	-	14.0	115	Lbs.	1,605	10.80	17,334
1986	-	13.0	143	Lbs.	1,859	10.70	19,891
1987	-	10.2	138	Lbs.	1,408	11.40	16,051
1988	-	9.7	130	Lbs.	1,261	11.60	14,628
Rapeseed							
1986	15	14	1,700	Lbs.	23,800	.075	1,785
1987	15	13	1,385	Lbs.	18,000	.075	1,350
Other Crops							
1984	-	111	-	-	-	-	31,900
1985	-	108	-	-	-	-	19,300
1986	-	130	-	-	-	-	38,400
1987	-	167	-	-	-	-	39,780
1988 3/	-	157	-	-	-	-	40,775
State Total 4/							
1984	5,381.4	5,104.4	-	-	-	-	1,508,748
1985	5,594.7	5,375.7	-	-	-	-	1,229,633
1986	5,120.3	4,898.3	-	-	-	-	1,054,581
1987	4,303.8	4,158.8	-	-	-	-	991,901
1988	4,274.3	4,098.3	-	-	-	-	1,374,071

1/ Corn planted acres is "Planted for Grain and Silage".

2/ Data provided by the American Dry Pea and Lentil Association.

3/ Other crops includes rapeseed for 1988.

4/ Planted acres for State total includes harvested acreage for hops, hay, mint, dry edible peas, lentils, and other crops.

NA Not available.

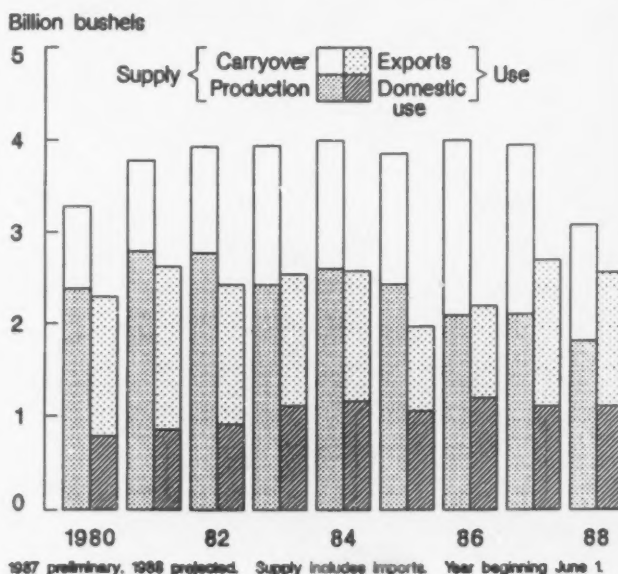
ALL WHEAT

The all wheat acreage planted in Washington was 2,170,000 acres in 1988 up 155,000 acres from the 1987 level. Harvested acreage was 2,060,000 with production of 124,620,000 bushels. The 1988 yield per acre of 60.5 increased 3.8 bushels to the acre from the 1987 yield of 56.7 bushels to the acre. The season average price per bushel rose sharply from \$2.82 in 1987 to \$4.25 in 1988, bringing the value of production to \$529.6 million in 1988.

Acreage, Production, and Price

Year	Acre Harvested	Yield Per Acre	Production	Season Avg. Price
	1,000	Bushels	1,000 Bushels	\$/Bu.
1979	2,980	39.6	118,000	3.90
1980	3,160	50.7	160,220	3.98
1981	3,050	55.2	168,350	3.92
1982	2,840	48.9	138,880	4.04
1983	2,690	64.2	172,570	3.69
1984	2,610	61.4	160,350	3.45
1985	2,690	47.7	128,250	3.41
1986	2,410	48.5	116,850	2.51
1987	2,015	56.7	114,285	2.82
1988	2,060	60.5	124,620	4.25

U.S. wheat supply and use



All Wheat Stocks

Crop Year	October			January *			April *			June *		
	On- Farm	Off- Farm	Total	On- Farm	Off- Farm	Total	On- Farm	Off- Farm	Total	On- Farm	Off- Farm	Total
1,000 Bushels												
1979	31,860	99,881	131,741	23,600	82,914	106,514	12,980	54,760	67,740	8,260	35,873	44,133
1980	49,668	134,651	184,319	32,044	98,753	130,797	16,022	61,936	77,958	6,409	40,102	46,511
1981	42,088	124,768	166,856	30,303	94,107	124,410	21,886	67,505	89,391	16,835	47,425	64,260
1982	44,442	124,614	169,056	31,942	102,873	134,815	26,387	77,856	104,243	20,832	64,282	85,114
1983	58,674	154,214	212,888	50,045	113,621	163,666	32,877	90,253	123,130	22,434	76,454	98,888
1984	52,916	147,996	200,912	40,088	116,865	156,953	28,863	93,006	121,869	22,449	85,775	108,224
1985	43,605	158,583	202,188	38,475	132,436	170,911	29,498	111,776	141,274	25,650	102,031	127,681
1986 1/	65,089	155,588	224,677	41,000	135,518	176,518	28,000	113,021	141,021	19,000	97,511	116,511
1987 1/	45,000	167,699	212,699	35,000	136,895	171,895	30,000	106,830	136,830	17,000	75,339	92,339
1988 1/	40,000	124,819	164,819	32,000	87,913	119,913	21,000	55,130	76,130	12,000	38,191	50,191

1/ Survey dates changed to September 1, December 1, March 1, and June 1 beginning with the 1986 crop.

* Following year.

All Wheat By County

County and District	1987				1988			
	Acreage		Yield Per Acre	Production	Acreage		Yield Per Acre	Production
	Planted	Harvested			Planted	Harvested		
	Acres	Acres	Bushels	Bushels	Acres	Acres	Bushels	Bushels
West								
Clark	500	400	65.0	26,000	500	400	50.0	20,000
Island	400	400	80.0	32,000	500	500	70.0	35,000
Lewis	600	500	78.0	39,000	600	500	80.0	40,000
Skagit	4,000	3,900	81.3	317,000	3,900	3,800	80.0	304,000
Snohomish	500	500	60.0	30,000	500	400	85.0	34,000
Whatcom	1,900	200	65.0	13,000	1,900	300	80.0	24,000
Other Co.	600	600	63.3	38,000	1,100	1,100	70.0	77,000
Total	8,500	6,500	76.2	495,000	9,000	7,000	76.3	534,000
Central								
Benton	97,500	96,000	38.9	3,730,000	129,000	127,700	40.3	5,145,000
Chelan	1,900	1,800	38.9	70,000	2,200	1,900	41.1	78,000
Kittitas	4,500	3,900	68.5	267,000	5,000	4,700	72.8	342,000
Klickitat	38,500	37,400	43.8	1,637,000	39,000	37,600	49.5	1,860,000
Okanogan	8,400	8,200	35.6	292,000	10,500	9,800	46.2	453,000
Yakima	35,200	32,700	52.1	1,704,000	33,300	29,300	65.3	1,912,000
Total	186,000	180,000	42.8	7,700,000	219,000	211,000	46.4	9,790,000
Northeast								
Ferry	700	600	36.7	22,000	800	600	55.0	33,000
Pend Oreille	200	200	40.0	8,000	200	200	40.0	8,000
Spokane	98,200	97,500	67.2	6,553,000	93,300	89,600	75.7	6,780,000
Stevens	8,900	8,700	49.2	428,000	12,700	11,600	67.6	784,000
Total	108,000	107,000	65.5	7,011,000	107,000	102,000	74.6	7,605,000
East Central								
Adams	331,000	309,000	40.0	12,375,000	350,000	309,000	50.9	15,719,000
Douglas	174,000	164,000	45.2	7,405,000	170,000	164,000	49.5	8,122,000
Franklin	97,000	94,500	55.6	5,250,000	97,000	96,000	56.7	5,444,000
Grant	172,000	159,000	67.4	10,720,000	169,000	159,000	75.8	12,045,000
Lincoln	305,000	300,500	51.6	15,506,000	314,000	308,000	68.1	20,980,000
Total	1,079,000	1,027,000	49.9	51,256,000	1,100,000	1,036,000	60.1	62,310,000
Southeast								
Asotin	26,100	25,900	50.2	1,300,000	22,500	21,900	46.9	1,027,000
Columbia	75,000	74,400	67.2	4,999,000	77,000	74,800	55.0	4,112,000
Garfield	66,700	65,900	59.0	3,890,000	67,000	63,800	54.8	3,494,000
Walla Walla	190,700	182,800	71.8	13,134,000	185,000	178,000	61.1	10,874,000
Whitman	360,000	345,500	70.9	24,500,000	383,500	365,500	68.1	24,874,000
Total	718,500	694,500	68.9	47,823,000	735,000	704,000	63.0	44,381,000
State Total	2,100,000	2,015,000	56.7	114,285,000	2,170,000	2,060,000	60.5	124,620,000

WINTER WHEAT

Winter wheat acreage seeded for harvest in 1988 was 1.85 million acres, the lowest level since 1962 and 3 percent below the 1987 acreage. Dry conditions and cool temperatures, which began early in the spring, caused concern among wheat growers. On May 29th, winter wheat headed was 24 percent, 28 points behind 1987. By June 19th, precipitation followed by warmer temperatures improved crop progress to 86 percent headed compared with 98 percent in 1987. Russian wheat aphids were reported in many areas of eastern Washington, but arrived too late to cause serious damage.

Harvested acreage in 1988 was 1.75 million acres, a decrease of 75,000 acres from 1987. On July 24th, 8 percent of the crop had been harvested compared to a five-year average of 14 percent. By August 21st, 90 percent was harvested, 3 points ahead of the five-year average. The average yield was up 9 percent from 57 bushels per acre in 1987, to 62 bushels per acre in 1988.

Acreage, Yield, and Production

Year	Acreage Harvested	Yield Per Acre	Production
	1,000	Bushels	1,000 Bushels
1979	2,200	43	94,600
1980	2,750	52	143,000
1981	2,830	57	161,310
1982	2,560	49	125,440
1983	2,500	65	162,500
1984	2,400	62	148,800
1985	2,400	48	115,200
1986	2,100	49	102,900
1987	1,825	57	104,025
1988	1,750	62	108,500

SPRING WHEAT

Spring seeding progressed normally through April. By April 24th, 91% of the acreage had been seeded and of that, 77% had emerged. Soil moisture levels remained low in many areas through the summer, but crop development remained near normal with 80% of the crop headed on June 26th compared with 82% in 1987 and 80% in 1986. Harvest progressed ahead of normal with 99% harvested on September 4th, compared with a five year average of 93% for that date. The final harvested acreage was 310,000 acres from the 320,000 acres planted. The yield averaged 52.0 bushels to the acre, 2 bushels per acre less than in 1987.

Acreage, Yield, and Production

Year	Acreage Harvested	Yield Per Acre	Production
	1,000	Bushels	1,000 Bushels
1979	780	30	23,400
1980	410	42	17,220
1981	220	32	7,040
1982	280	48	13,440
1983	190	53	10,070
1984	210	55	11,550
1985	290	45	13,050
1986	310	45	13,950
1987	190	54	10,260
1988	310	52	16,120

WHEAT VARIETY SURVEY

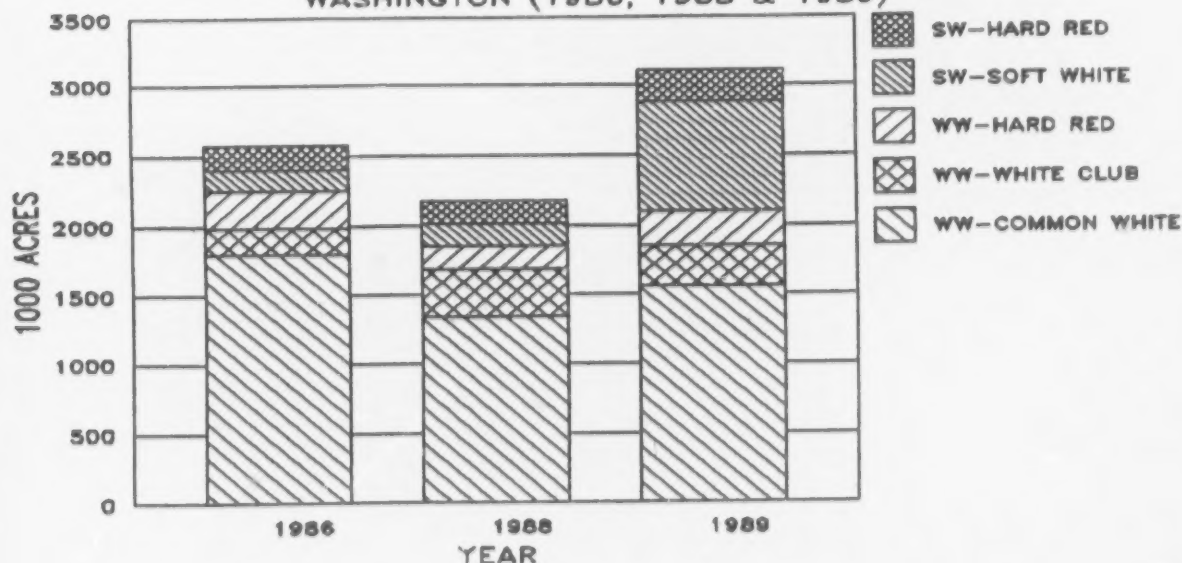
Funding for the 1989 Wheat Variety Survey was provided by the Washington Wheat Commission.

Wheat acreage planted in Washington for 1989 is estimated at 3.1 million acres, up 43 percent from 1988. Winter wheat accounts for 2.1 million acres, up 13.5 percent from last year. However, only 1.3 million acres will be harvested due to the high rate of winter-kill. This is the lowest harvested acreage for winter wheat since 1943, when 864,000 acres were harvested. The high abandonment in winter wheat resulted in producers planting one million acres of spring wheat compared with 320,000 acres last year. The spring wheat acreage is at the highest level since 1944's 1,024,000 acres planted and the record year for acreage of 1.7 million acres planted in 1937. The combined winter and spring wheat harvested acreage is 2.27 million acres, up 10 percent from last year and comparable to the 5-year average harvested acreage of 2.36 million acres.

Common White continues to be the most popular class of winter wheat, up 3 percentage points from a year ago. The leading Common White variety for the 1989 crop is Stephens with 25 percent of the total winter wheat planted. White Club declined in popularity by 5 percentage points. Tres remains the leading club variety with 156,500 acres planted. Acres planted to Hard Red Winter show an increase, of 62,000 acres over last year's 187,700 acres, to 249,000 acres this year. Weston dominated the class with 113,300 acres.

Spring wheat acreage shows a shift from Hard Red Spring to Soft White. Soft White accounts for 78 percent of the total spring wheat acreage while Hard Red Spring accounts for 22 percent. Last year's percentages were 52 and 48, respectively. Edwall clearly remains the Soft White variety favored most by spring wheat growers with 240,400 acres planted. Topping the Hard Red Spring class is Wampum with 96,500 acres.

WHEAT ACRES PLANTED BY CLASS
WASHINGTON (1986, 1988 & 1989)



ACRES PLANTED BY VARIETY, BY AGRICULTURAL STATISTICS DISTRICTS, WASHINGTON

CLASS/ VARIETY	1989 WEST	1989 CENTRAL	1989 NORTHEAST	1989 E. CENTRAL	1989 SOUTHEAST	1989 STATE	1988 STATE
WINTER WHEAT							
COMMON WHITE:							
STEPHENS	3,900	44,900	15,900	119,300	334,300	518,300	419,900
LEWJAIN	300	1,700	18,700	285,100	10,200	316,000	227,100
HILL 81	100	6,100	56,900	35,200	183,200	281,500	274,400
DAWS	0	500	25,600	46,100	59,600	131,800	126,000
SPRAGUE	0	2,400	0	118,500	500	121,400	103,000
CASHUP	500	0	2,400	24,500	64,900	92,300	58,700
G & NEWGAINES	0	300	2,400	13,600	600	16,900	17,600
STEPHENS-HILL*	0	0	0	0	15,900	15,900	NA
DUSTY	0	1,600	400	5,000	6,900	13,900	12,400
STEPHENS-DAWS*	0	0	1,700	1,800	9,500	13,000	NA
MALCOM	500	1,700	0	5,500	2,000	9,700	NA
JOHN	0	100	0	7,000	0	7,100	NA
BASIN	1,200	0	0	1,800	0	3,000	NA
LUKE	0	100	300	1,800	0	2,200	NA
YAMHILL	0	0	0	0	2,000	2,000	NA
OTHER COMMON 1/	0	100	3,500	5,800	5,600	15,000	69,500
TOTAL	6,500	59,500	127,800	671,000	695,200	1,560,000	1,317,200
WHITE CLUB:							
TRES	0	3,700	3,200	124,600	25,000	156,500	221,100
MORO	0	2,400	0	98,000	1,400	101,800	77,500
CREW	0	400	1,400	15,900	3,000	20,700	23,700
TYEE	0	1,300	600	6,500	0	8,400	18,900
OTHER CLUB 2/	0	100	0	3,500	0	3,600	3,900
TOTAL	0	7,900	5,200	248,500	29,400	291,000	345,100
HARD RED:							
WESTON	0	77,700	0	34,400	1,200	113,300	81,400
HATTON	0	13,000	0	85,600	0	98,600	84,000
WANSER	0	20,500	0	0	0	20,500	9,600
BATUM	0	700	0	4,500	0	5,200	10,800
ANDREWS	0	0	0	4,600	0	4,600	NA
OTHER HARD RED 3/	500	700	0	1,400	4,200	6,800	1,900
TOTAL	500	112,600	0	130,500	5,400	249,000	187,700
TOTAL WINTER	7,000	180,000	133,000	1,050,000	730,000	2,100,000	1,850,000

**PERCENT OF WHEAT ACREAGE PLANTED BY VARIETY, BY AGRICULTURAL STATISTICS
DISTRICTS, WASHINGTON**

CLASS/ VARIETY	1989 WEST	1989 CENTRAL	1989 NORTHEAST	1989 E. CENTRAL	1989 SOUTHEAST	1989 STATE	1988 STATE
WINTER WHEAT							
COMMON WHITE:							
STEPHENS	55.7	24.9	12.0	11.4	45.8	24.7	22.7
LEWJAIN	4.3	0.9	14.1	27.2	1.4	15.0	12.3
HILL 81	1.4	3.4	42.8	3.4	25.1	13.4	14.8
DAWS	0.0	0.3	19.2	4.4	8.2	6.3	6.8
SPRAGUE	0.0	1.3	0.0	11.3	0.1	5.8	5.6
CASHUP	7.1	0.0	1.8	2.3	8.9	4.4	3.2
G & NEWGAINES	0.0	0.1	1.8	1.3	0.1	0.8	0.7
STEPHENS-HILL*	0.0	0.0	0.0	0.0	2.2	0.7	NA
DUSTY	0.0	0.9	0.3	0.5	1.0	0.7	1.4
STEPHENS-DAWS*	0.0	0.0	1.3	0.2	1.3	0.6	NA
MALCOM	7.1	0.9	0.0	0.5	0.3	0.5	NA
JOHN	0.0	0.1	0.0	0.7	0.0	0.3	NA
BASIN	17.1	0.0	0.0	0.2	0.0	0.1	NA
LUKE	0.0	0.1	0.2	0.2	0.0	0.1	NA
YAMHILL	0.0	0.0	0.0	0.0	0.3	0.1	NA
OTHER COMMON 1/	0.0	0.1	2.6	0.6	0.8	0.7	3.7
TOTAL	92.9	33.0	96.1	63.9	95.3	74.3	71.2
WHITE CLUB:							
TRES	0.0	2.1	2.4	11.9	3.4	7.5	12.0
MORO	0.0	1.3	0.0	9.3	0.2	4.8	4.2
CREW	0.0	0.2	1.1	1.5	0.4	1.0	1.3
TYEE	0.0	0.7	0.5	0.6	0.0	0.4	1.0
OTHER CLUB 2/	0.0	0.1	0.0	0.3	0.0	0.2	0.2
TOTAL	0.0	4.4	3.9	23.7	4.0	13.9	18.7
HARD RED:							
WESTON	0.0	43.2	0.0	3.3	0.2	5.4	4.4
HATTON	0.0	7.2	0.0	8.2	0.0	4.7	4.5
WANSER	0.0	11.4	0.0	0.0	0.0	1.0	0.5
BATUM	0.0	0.4	0.0	0.4	0.0	0.2	0.6
ANDREWS	0.0	0.0	0.0	0.4	0.0	0.2	NA
OTHER HARD RED 3/	7.1	0.4	0.0	0.1	0.6	0.3	0.1
TOTAL	7.1	62.6	0.0	12.4	0.7	11.9	10.1
TOTAL WINTER	100.0	100.0	100.0	100.0	100.0	100.0	100.0

1/ Includes Madsen, Daws-Hill 81*, Daws-Lewjain*, and Lewjain-Hill 81*.

2/ Hyak and Paha.

3/ Bounty and McCall.

NA - Insufficient acreage planted to report.

* - Mixed Varieties.

ACRES PLANTED BY VARIETY, BY AGRICULTURAL STATISTICS DISTRICTS, WASHINGTON

CLASS/ VARIETY	1989 WEST	1989 CENTRAL	1989 NORTHEAST	1989 E. CENTRAL	1989 SOUTHEAST	1989 STATE	1988 STATE
SPRING WHEAT							
SOFT WHITE:							
EDWALL	300	4,800	21,400	173,700	40,200	240,400	101,200
PENAWAWA	100	2,700	6,200	58,700	40,700	108,400	7,000
BLISS	0	100	6,200	77,100	17,100	100,500	NA
OWENS	200	0	4,300	37,900	44,000	86,400	3,100
WAVERLY	0	6,900	3,400	32,900	18,500	61,700	12,000
TWIN	300	1,300	2,400	30,600	10,200	44,800	2,000
FIELDER	0	800	0	27,400	4,800	33,000	3,900
DIRKWIN	300	2,400	1,900	4,900	13,700	23,200	13,500
URQUIE	0	200	0	14,400	100	14,700	6,600
FIELDWIN	0	3,400	300	4,900	3,700	12,300	7,100
WS-1	0	0	0	7,800	4,000	11,800	5,600
LANDMARK	NA	NA	NA	NA	NA	NA	1,200
MARFED	NA	NA	NA	NA	NA	NA	1,300
SPRITE	0	100	0	3,400	500	4,000	NA
OTHER SOFT 4/	100	600	300	11,400	7,500	19,900	500
UNKNOWN SOFT	200	400	1,200	11,900	5,200	18,900	NA
TOTAL	1,500	23,700	47,600	497,300	210,200	780,000	165,000
HARD RED:							
WAMPUM	0	79,500	0	15,100	1,900	96,500	42,600
WESTBRED 906	0	2,000	3,300	15,900	12,300	33,500	49,300
YECORA ROJO	500	7,600	0	10,400	1,700	20,200	20,800
WESTBRED 926R	0	1,600	0	9,000	3,400	14,000	3,100
NEWANA	0	200	0	10,500	0	10,700	9,000
NOMAD	0	0	0	4,100	2,100	6,200	NA
TAMMY	0	0	0	5,300	0	5,300	4,200
McKAY	0	100	0	4,100	0	4,200	11,000
BUTTE 86	0	0	0	3,300	400	3,700	NA
KODIAK	0	0	0	2,200	200	2,400	NA
BRONZE CHIEF	NA	NA	NA	NA	NA	NA	4,700
PONDERA	NA	NA	NA	NA	NA	NA	3,100
OTHER HARD RED 5/	0	5,400	100	10,700	500	16,700	7,200
UNKNOWN HARD RED	0	2,900	0	3,400	300	6,600	NA
TOTAL	500	99,300	3,400	94,000	22,800	220,000	155,000
TOTAL SPRING	2,000	123,000	51,000	591,000	233,000	1,000,000	320,000
TOTAL ALL WHEAT	9,000	303,000	184,000	1,641,000	963,000	3,100,000	2,170,000

**PERCENT OF WHEAT ACREAGE PLANTED BY VARIETY, BY AGRICULTURAL STATISTICS
DISTRICTS, WASHINGTON**

CLASS/ VARIETY	1989 WEST	1989 CENTRAL	1989 NORTHEAST	1989 E. CENTRAL	1989 SOUTHEAST	1989 STATE	1988 STATE
SPRING WHEAT							
SOFT WHITE:							
EDWALL	15.0	3.9	42.0	29.4	17.3	24.0	31.7
PENAWAWA	5.0	2.2	12.2	9.9	17.5	10.8	2.2
BLISS	0.0	0.1	12.2	13.0	7.3	10.1	NA
OWENS	10.0	0.0	8.4	6.4	18.9	8.6	1.0
WAVERLY	0.0	5.6	6.7	5.6	7.9	6.2	3.8
TWIN	15.0	1.1	4.7	5.2	4.4	4.5	0.6
FIELDER	0.0	0.7	0.0	4.6	2.1	3.3	1.2
DIRKWIN	15.0	2.0	3.7	0.8	5.9	2.3	4.2
URQUIE	0.0	0.2	0.0	2.4	0.0	1.5	2.1
FIELDWIN	0.0	2.8	0.6	0.8	1.6	1.2	2.2
WS-1	0.0	0.0	0.0	1.3	1.7	1.2	1.8
LANDMARK	NA	NA	NA	NA	NA	NA	NA
MARFED	NA	NA	NA	NA	NA	NA	NA
SPRITE	0.0	0.1	0.0	0.6	0.2	0.4	NA
OTHER SOFT 4/	5.0	0.5	0.6	1.9	3.2	2.0	0.8
UNKNOWN SOFT	10.0	0.3	2.4	2.0	2.2	1.9	NA
TOTAL	75.0	19.3	93.3	84.1	90.2	78.0	51.6
HARD RED:							
WAMPUM	0.0	64.6	0.0	2.6	0.8	9.7	13.3
WESTBRED 906R	0.0	1.6	6.5	2.7	5.3	3.4	15.4
YECORA ROJO	25.0	6.2	0.0	1.8	0.7	2.0	6.5
WESTBRED 926	0.0	1.3	0.0	1.5	1.5	1.4	1.0
NEWANA	0.0	0.2	0.0	1.8	0.0	1.1	2.8
NOMAD	0.0	0.0	0.0	0.7	0.9	0.6	NA
TAMMY	0.0	0.0	0.0	0.9	0.0	0.5	1.3
McKAY	0.0	0.1	0.0	0.7	0.0	0.4	3.4
BUTTE 86	0.0	0.0	0.0	0.6	0.2	0.4	NA
KODIAK	0.0	0.0	0.0	0.4	0.1	0.2	NA
BRONZE CHIEF	NA	NA	NA	NA	NA	NA	1.5
PONDERA	NA	NA	NA	NA	NA	NA	1.0
OTHER HARD RED 5/	0.0	4.4	0.2	1.8	0.2	1.7	2.2
UNKNOWN HARD RED	0.0	2.4	0.0	0.6	0.1	0.7	NA
TOTAL	25.0	80.7	6.7	15.9	9.8	22.0	48.4
TOTAL SPRING	100.0	100.0	100.0	100.0	100.0	100.0	100.0

4/Marfed, Edwall-Penawawa*, Pondera and Urquie-Waverly*.

5/Bronze Chief, Czar, Westbred 911R, Katepwa and Fortuna.

NA - Insufficient acreage planted to report.

- Not Applicable.

Winter Wheat by County, 1988

County And District	All				Irrigated			Dryland		
	Acreage		Yld	Production	Acreage Harvested	Yld	Production	Acreage Harvested	Yld	Production
	Planted	Harvested								
	Acreage				Bushels			Acreage		

Spring Wheat by County, 1987

County And District	All				Irrigated				Dryland																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
	Acreage		Yld	Production	Acreage Harvested	Yld	Production	Acreage Harvested	Yld	Production																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
	Planted	Harvested																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
	Bushels				Bushels						Bushels																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
Acreage				Acreage				Acreage																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
West				Central				Northeast				East Central				Southeast																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
Skagit	1,100	1,100	71.8	79,000	-	-	-	-	1,100	71.8	79,000	-	-	-	-	1,100	71.8	79,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-</

- Not Applicable.

Spring Wheat by County, 1988

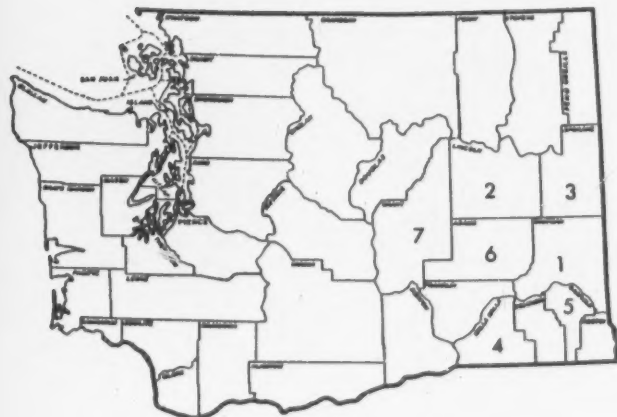
County And District	All				Irrigated				Dryland				
	Acreage		Yld	Production	Acreage Harvested	Yld	Production	Acreage Harvested	Yld	Production	Acreage Harvested	Yld	Production
	Planted	Harvested											
	Acreage	Harvested	Yld	Production	Acreage	Harvested	Yld	Production	Acreage	Harvested	Yld	Production	
						</							

- Not Applicable.

BARLEY

Cooler temperatures through mid-April slowed early development, but warmer temperatures and precipitation improved crop conditions by mid-May. Average growing conditions continued through the season.

Acres planted decreased 12% from 660,000 acres in 1987 to 580,000 acres in 1988. Harvested acres decreased 13% from the 1987 acreage to 560,000 acres in 1988. Optimum harvest conditions were experienced and the 1988 average yield per acre increased 13% from 1987, the highest since 1984.



Acreage, Production and Price

Year	Acres Harvested	Yield Per Acre	Production	Season Avg. Price
			1,000	
	1,000	Bushels	Bushels	\$/Bu.
1979	315	54	17,010	2.54
1980	430	75	32,250	2.91
1981	760	58	44,080	2.50
1982	810	61	49,410	2.23
1983	850	64	54,400	2.58
1984	980	65	63,700	2.25
1985	1,180	48	56,640	1.95
1986	900	50	45,000	1.67
1987	645	55	35,475	1.87
1988	560	62	34,720	2.45

Barley Stocks

Crop Year	October			January *			April *			June *		
	On-Farm	Off-Farm	Total	On-Farm	Off-Farm	Total	On-Farm	Off-Farm	Total	On-Farm	Off-Farm	Total
	1,000 Bushels											
1979	4,583	13,499	18,082	3,402	8,513	11,915	2,552	4,496	7,048	1,021	3,293	4,314
1980	6,773	19,696	26,469	4,193	14,253	18,446	2,258	5,231	7,489	968	2,376	3,344
1981	9,698	24,112	33,810	6,612	14,166	20,778	3,967	5,432	9,399	1,763	4,046	5,809
1982	9,882	29,036	38,918	6,423	23,419	29,842	3,459	14,607	18,066	2,223	12,146	14,369
1983	13,600	33,846	47,446	8,160	20,947	29,107	3,264	16,494	19,758	2,176	11,612	13,788
1984	14,651	35,772	50,423	9,555	22,928	32,483	5,733	17,387	23,120	3,412	14,519	18,341
1985	16,992	36,719	53,711	11,328	28,563	39,891	1/	1/	1/	5,064	20,791	26,455
1986										3,000	21,485	24,485
1987 1/										2,700	8,859	11,559
1988 1/										2,900	5,718	8,618

1/ Estimates discontinued for all quarters except June.

* Following Year.

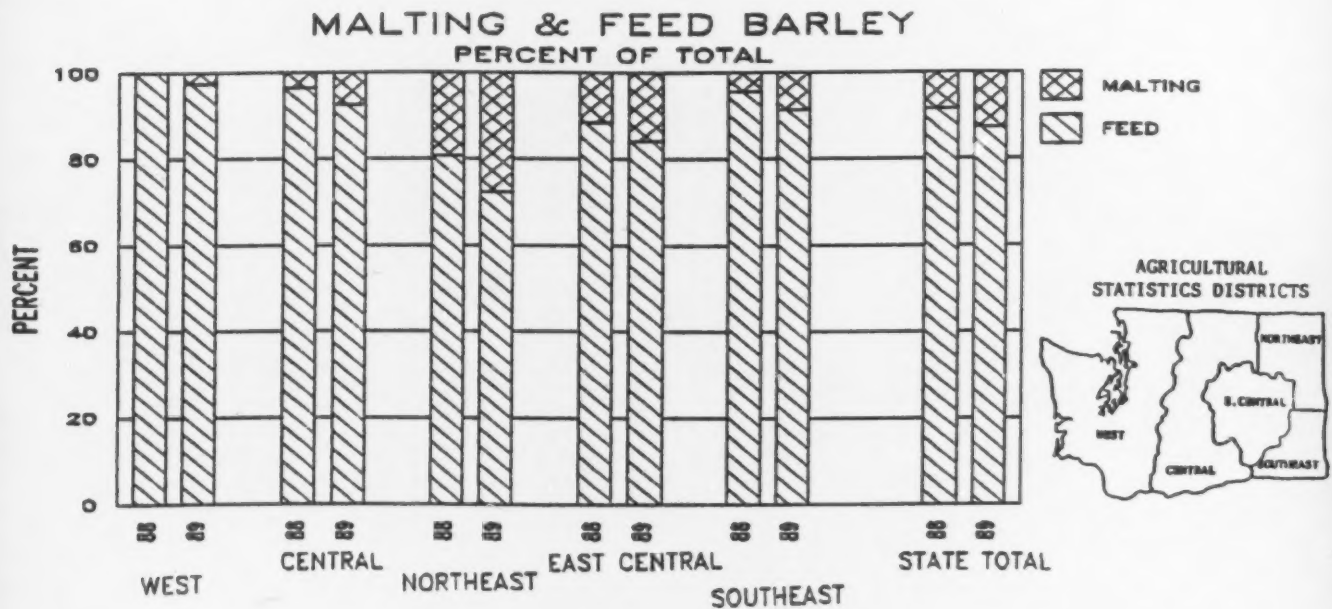
BARLEY VARIETY SURVEY

Funds to conduct the 1989 Barley Variety Survey were provided jointly by the Americal Malting Barley Association, Inc. and the Washington Barley Commission.

Barley acreage seeded in Washington for 1989 continued to decline for the fourth consecutive year. The 1989 planted acreage is estimated at 500,000 acres, down 14 percent from 1988, and 58 percent less than the record planting of 1.2 million acres in 1985.

Feed type barley varieties continue to be the most popular type of barley grown in Washington. About 87 percent or 435,700 acres of the State's barley acreage consists of feed type barley varieties. Steptoe was again the most popular feed variety, topping the list with 70 percent of the total barley acreage. Other popular feed type varieties were Cougar at 16,500 acres, Boyer at 15,500 acres and Kamiak at 8,600 acres.

Both the acreage and percent of the total acreage of malting varieties is higher than 1988. The percent of the State's acreage in malting varieties was 13 percent, 5 percentage points higher than 1988, and the acreage planted was 64,300 acres compared with 46,400 acres last year. Harrington accounts for 16,100 acres and continues to be the favorite malting type variety. Crystal is the second ranking malting variety with 9,000 acres and Morex was third with 8,900 acres.



**Barley: Acres Planted by Variety, By Agricultural Statistics Districts,
Washington, 1988-89**

Variety Year	West	Central	Northeast	E. Central	Southeast	State
	Acres					
Step toe						
1988	2,500	18,400	30,500	148,500	170,200	370,100
1989	4,400	12,700	27,300	112,800	194,200	351,400
Cougbar						
1988	0	0	1,900	7,400	6,000	15,300
1989	0	100	2,400	1,200	12,800	16,500
Harrington *						
1988	0	0	500	12,700	2,600	15,800
1989	0	0	4,300	6,300	5,500	16,100
Boyer						
1988	300	100	3,200	6,600	35,000	45,200
1989	0	900	800	2,500	11,300	15,500
Crystal *						
1988	NA	NA	NA	NA	NA	NA
1989	0	0	0	9,000	0	9,000
Morex *						
1988	0	0	8,000	1,400	1,400	10,800
1989	0	0	7,800	100	1,000	8,900
Kamiak						
1988	0	1,600	1,000	3,700	30,800	37,100
1989	0	500	0	800	7,300	8,600
Klages *						
1988	0	0	0	8,800	0	8,800
1989	0	0	0	6,000	0	6,000
Bridger 82 *						
1988	NA	NA	NA	NA	NA	NA
1989	0	100	0	0	5,900	6,000
Camelot *						
1988	NA	NA	NA	NA	NA	NA
1989	0	0	700	2,500	2,300	5,500
Lindy						
1988	NA	NA	NA	NA	NA	NA
1989	0	0	0	4,800	0	4,800
Lewis						
1988	0	100	2,400	800	300	3,600
1989	0	100	1,400	300	2,800	4,600
Showin						
1988	0	200	2,700	2,400	7,400	12,700
1989	0	300	400	600	3,200	4,500
Westbred Gustoe						
1988	200	1,800	0	1,200	1,100	4,300
1989	0	1,200	700	1,600	500	4,000
Piston						
1988	NA	NA	NA	NA	NA	NA
1989	0	0	3,800	0	200	4,000
Andre *						
1988	NA	NA	NA	NA	NA	NA
1989	0	0	0	0	4,000	4,000
Menuet						
1988	1,400	200	1,300	800	0	3,700
1989	2,100	0	1,200	300	0	3,600
Clark *						
1988	0	100	2,400	400	3,200	6,100
1989	0	0	900	100	2,000	3,000
Columbia						
1988	NA	NA	NA	NA	NA	NA
1989	300	600	0	1,400	300	2,600
Belford						
1988	NA	NA	NA	NA	NA	NA
1989	0	1,400	900	0	0	2,300
Advance*						
1988	0	0	600	400	4,800	5,800
1989	NA	NA	NA	NA	NA	NA
Kombar						
1988	200	500	0	2,600	1,200	4,500
1989	NA	NA	NA	NA	NA	NA
Spring Flyn						
1988	0	4,000	0	0	300	4,300
1989	NA	NA	NA	NA	NA	NA
Other						
1988	900	2,500	5,500	7,300	15,700	31,900
1989	1,200	2,100	2,400	3,700	9,700	19,100
State Total						
1988	5,500	29,500	60,000	205,000	280,000	580,000
1989	8,000	20,000	55,000	154,000	263,000	500,000

* Malting Varieties

NA Insufficient acreage planted to report.

**Percent of Acreage Planted by Variety, By Agricultural Statistics Districts,
Washington, 1988-89**

Variety Year	West	Central	Northeast	E. Central	Southeast	State
	Percent					
Steptoe						
1988	45.5	62.4	50.8	72.4	60.8	63.8
1989	55.5	63.5	49.6	73.3	73.8	70.3
Cougbar						
1988	0	0	3.2	3.6	2.1	2.6
1989	0	.5	4.4	.8	4.9	3.3
Harrington *						
1988	0	0	.8	6.2	.9	2.7
1989	0	0	7.8	4.1	2.1	3.2
Boyer						
1988	5.5	.3	5.3	3.2	12.5	7.8
1989	0	4.5	1.5	1.6	4.3	3.1
Crystal *						
1988	NA	NA	NA	NA	NA	NA
1989	0	0	0	5.8	0	1.8
Morex *						
1988	0	0	13.3	.7	.5	1.9
1989	0	0	14.2	.1	.4	1.8
Kamiak						
1988	0	5.4	1.7	1.8	11.0	6.4
1989	0	2.5	0	.5	2.8	1.7
Klages *						
1988	0	0	0	4.3	0	1.5
1989	0	0	0	3.9	0	1.2
Bridger 82 *						
1988	NA	NA	NA	NA	NA	NA
1989	0	.5	0	0	2.2	1.2
Camelot *						
1988	NA	NA	NA	NA	NA	NA
1989	0	0	1.3	1.6	.9	1.1
Lindy						
1988	NA	NA	NA	NA	NA	NA
1989	0	0	0	3.1	0	1.0
Lewis						
1988	0	.3	4.0	.4	.1	.6
1989	0	.5	2.5	.2	1.1	.9
Showin						
1988	0	.7	4.5	1.2	2.6	2.2
1989	0	1.5	.7	.4	1.2	.9
Westbred Gustoe						
1988	3.6	6.1	0	.6	.4	.7
1989	0	6.0	1.3	1.0	.2	.8
Piston						
1988	NA	NA	NA	NA	NA	NA
1989	0	0	6.9	0	.1	.8
Andre *						
1988	NA	NA	NA	NA	NA	NA
1989	0	0	0	0	1.5	.8
Menuet						
1988	25.5	.7	2.2	.4	0	.7
1989	26.3	0	2.2	.2	0	.7
Clark *						
1988	0	.3	4.0	.2	1.1	1.1
1989	0	0	1.6	.1	.8	.6
Columbia						
1988	NA	NA	NA	NA	NA	NA
1989	3.8	3.0	0	.9	.1	.5
Belford						
1988	NA	NA	NA	NA	NA	NA
1989	0	7.0	1.6	0	0	.5
Advance *						
1988	0	0	1.0	.2	1.7	1.0
1989	NA	NA	NA	NA	NA	NA
Kombar						
1988	3.6	1.7	0	1.3	.4	.8
1989	NA	NA	NA	NA	NA	NA
Spring Flyn						
1988	0	13.6	0	0	.1	.7
1989	NA	NA	NA	NA	NA	NA
Other						
1988	16.4	8.5	9.2	3.6	5.6	5.5
1989	14.9	10.5	4.4	2.4	3.6	3.8
State Total						
1988	100	100	100	100	100	100
1989	100	100	100	100	100	100

* Malting Varieties

NA Insufficient acreage planted to report.

Barley by County, 1987

County And District	All						Irrigated				Dryland			
	Acreage		Bushels				Acreage Harvested	Yld	Production	Acreage Harvested	Yld	Production		
	Planted	Harvested	Yld	Production										
West	Acre		Bushels				Acre	Bushels		Acre	Bushels			
	300	300	73.3	22,000	-	-	300	73.3	22,000	-	-	-		
	2,200	2,200	84.1	185,000	-	-	2,200	84.1	185,000	-	-	-		
	400	400	100.0	40,000	-	-	400	100.0	40,000	-	-	-		
	300	300	66.7	20,000	-	-	300	66.7	20,000	-	-	-		
	1,500	1,500	94.7	142,000	-	-	1,500	94.7	142,000	-	-	-		
	500	500	72.0	36,000	-	-	500	72.0	36,000	-	-	-		
	400	400	62.5	25,000	-	-	400	62.5	25,000	-	-	-		
	400	400	72.5	29,000	-	-	400	72.5	29,000	-	-	-		
	Total	6,000	6,000	83.2	499,000	-	-	6,000	83.2	499,000	-	-	-	
Central	9,300	8,600	44.0	378,000	1,300	120.0	156,000	7,300	30.4	222,000				
	300	200	30.0	6,000	-	-	-	200	30.0	6,000				
	1,200	1,100	90.0	99,000	1,100	90.0	99,000	-	-	-				
	10,800	10,200	41.0	418,000	400	67.5	27,000	9,800	39.9	391,000				
	800	700	34.3	24,000	100	40.0	4,000	600	33.3	20,000				
	12,600	12,200	68.0	829,000	7,600	90.0	684,000	4,600	31.5	145,000				
Total	35,000	33,000	53.2	1,754,000	10,500	92.4	970,000	22,500	34.8	784,000				
Northeast	400	300	43.3	13,000	-	-	-	300	43.3	13,000				
	800	800	81.3	65,000	200	110.0	22,000	600	71.7	43,000				
	61,500	60,700	59.0	3,581,000	500	110.0	55,000	60,200	58.6	3,526,000				
	7,300	7,200	50.0	360,000	800	60.0	48,000	6,400	48.8	312,000				
	Total	70,000	69,000	58.2	4,019,000	1,500	83.3	125,000	67,500	57.7	3,894,000			
East Central	62,400	61,000	41.0	2,502,000	11,300	80.0	904,000	49,700	32.2	1,598,000				
	12,100	11,800	49.0	578,000	200	80.0	16,000	11,600	48.4	562,000				
	22,600	21,800	45.0	981,000	4,000	90.0	360,000	17,800	34.9	621,000				
	26,400	25,900	80.0	2,072,000	11,300	125.0	1,413,000	14,600	45.1	659,000				
	138,500	136,500	49.0	6,689,000	11,200	80.0	896,000	123,300	46.2	5,793,000				
Total	262,000	257,000	49.9	12,822,000	38,000	94.4	3,589,000	219,000	42.2	9,233,000				
Southeast	12,000	10,200	52.0	530,000	100	90.0	9,000	10,100	51.6	521,000				
	16,400	16,000	64.0	1,024,000	-	-	-	16,000	64.0	1,024,000				
	37,600	36,800	55.0	2,024,000	300	76.7	23,000	36,500	54.8	2,001,000				
	32,000	31,300	59.0	1,846,000	2,200	80.0	176,000	29,100	57.4	1,670,000				
	189,000	185,700	59.0	10,957,000	400	60.0	24,000	185,300	59.0	10,933,000				
Total	287,000	280,000	58.5	16,381,000	287,300	77.3	232,000	277,000	58.3	16,149,000				
State Total	660,000	645,000	55.0	35,475,000	53,000	92.8	4,916,000	592,000	51.6	30,559,000				

Barley by County, 1988

County And District	All				Irrigated				Dryland			
	Acreage		Yld	Production	Acreage Harvested	Yld	Production	Acreage Harvested	Yld	Production		
	Planted	Harvested										
	Acreage											
	Planted	Harvested	Yld	Production	Harvested	Yld	Production	Harvested	Yld	Production		
West												
Clallam	300	300	70.0	21,000	-	-	-	300	70.0	21,000		
Clark	1,500	1,400	80.0	112,000	-	-	-	1,400	80.0	112,000		
Island	300	300	80.0	24,000	-	-	-	300	80.0	24,000		
Lewis	600	500	70.0	35,000	-	-	-	500	70.0	35,000		
Skagit	1,600	1,300	90.0	117,000	-	-	-	1,300	90.0	117,000		
Snohomish	300	300	70.0	21,000	-	-	-	300	70.0	21,000		
Whatcom	400	400	65.0	26,000	-	-	-	400	65.0	26,000		
Other Co.	500	500	68.0	34,000	-	-	-	500	68.0	34,000		
Total	5,500	5,000	78.0	390,000	-	-	-	5,000	78.0	390,000		
Central												
Benton	11,300	10,700	50.0	535,000	1,300	110.0	143,000	9,400	41.7	392,000		
Chelan	300	200	30.0	6,000	-	-	-	200	30.0	6,000		
Kittitas	1,500	1,400	100.0	140,000	1,300	104.6	136,000	100	40.0	4,000		
Klickitat	8,300	8,000	51.0	408,000	300	80.0	24,000	7,700	49.9	384,000		
Okanogan	700	600	38.3	23,000	100	40.0	4,000	500	38.0	19,000		
Yakima	7,400	7,100	80.0	568,000	4,000	110.0	440,000	3,100	41.3	128,000		
Total	29,500	28,000	60.0	1,680,000	7,000	106.7	747,000	21,000	44.4	933,000		
Northeast												
Ferry	300	200	45.0	9,000	100	50.0	5,000	100	40.0	4,000		
Pend Oreille	600	600	50.0	30,000	100	90.0	9,000	500	42.0	21,000		
Spokane	51,400	49,700	68.0	3,381,000	1,200	110.0	132,000	48,500	67.0	3,249,000		
Stevens	7,700	7,500	62.0	465,000	600	85.0	51,000	6,900	60.0	414,000		
Total	60,000	58,000	67.0	3,885,000	2,000	98.5	197,000	56,000	65.9	3,688,000		
East Central												
Adams	42,000	41,500	44.0	1,826,000	7,400	80.0	592,000	34,100	36.2	1,234,000		
Douglas	9,000	9,000	52.0	468,000	100	90.0	9,000	8,900	51.6	459,000		
Franklin	10,000	9,500	70.0	665,000	4,500	102.0	459,000	5,000	41.2	206,000		
Grant	22,000	21,500	71.0	1,527,000	8,500	104.0	884,000	13,000	49.5	643,000		
Lincoln	122,000	117,500	55.0	6,459,000	7,500	90.0	675,000	110,000	52.6	5,784,000		
Total	205,000	199,000	55.0	10,945,000	28,000	93.5	2,619,000	171,000	48.7	8,326,000		
Southeast												
Asotin	11,000	10,000	40.0	400,000	-	-	-	10,000	40.0	400,000		
Columbia	18,000	17,000	51.0	867,000	-	-	-	17,000	51.0	867,000		
Garfield	35,000	34,000	55.0	1,870,000	300	70.0	21,000	33,700	54.9	1,849,000		
Walla Walla	27,000	26,000	72.0	1,872,000	1,400	80.0	112,000	24,600	71.5	1,760,000		
Whitman	189,000	183,000	70.0	12,811,000	300	90.0	27,000	182,700	70.0	12,784,000		
Total	280,000	270,000	66.0	17,820,000	2,000	80.0	160,000	268,000	65.9	17,660,000		
State Total	580,000	560,000	62.0	34,720,000	39,000	95.5	3,723,000	521,000	59.5	30,997,000		

- Not Applicable.

OATS

Oat acreage planted in 1988 increased 7% from the 1987 acreage of 75,000 acres. Acreage harvested for grain also increased from 1987 acreage and was the largest since 1973. Favorable growing conditions were experienced from mid-May to the end of the season, and the 1988 yield of 67.0 bushels per acre was 1 bushel per acre short of 1984 record yield of 68 bushels per acre.



Acreage, Production and Price

Year	Acres Harvested	Yield Per Acre	Production	Season Avg. Price
			1,000 Bushels	\$/Bu.
1979	33	53	1,749	1.70
1980	30	62	1,860	2.10
1981	32	50	1,600	2.19
1982	30	62	1,860	1.87
1983	33	63	2,079	1.61
1984	30	68	2,040	1.80
1985	33	65	2,145	1.50
1986	33	65	2,145	1.10
1987	35	66	2,310	1.40
1988	37	67	2,479	2.10

Oat Stocks

Crop Year	October			January *			April *			June *		
	On-Farm	Off-Farm	Total	On-Farm	Off-Farm	Total	On-Farm	Off-Farm	Total	On-Farm	Off-Farm	Total
	1,000 Bushels											
1979	1,049	697	1,746	717	498	1,215	507	311	818	262	213	475
1980	930	407	1,337	744	358	1,102	521	188	709	260	115	375
1981	1,040	272	1,312	800	213	1,013	560	175	735	256	131	387
1982	1,283	616	1,899	986	602	1,588	707	399	1,106	335	356	691
1983	1,663	615	2,278	1,040	526	1,566	707	314	1,021	312	180	492
1984	1,530	344	1,874	1,020	313	1,333	551	163	714	326	137	463
1985	1,823	270	2,093	1,158	241	1,399	1/	1/	1/	2/	174	2/
1986 1/										2/	133	2/
1987 1/										2/	180	2/
1988 1/										2/	428	2/

1/ Estimates discontinued for all quarters except June.

2/ Not published to avoid disclosure of individual reports.

* Following year.

Oats By County

County and District	1987				1988			
	Acreage		Yield Per Acre	Production	Acreage		Yield Per Acre	Production
	Planted	Harvested			Planted	Harvested		
	Acres		Bushels		Acres		Bushels	
West								
Clark	18,500	4,500	88.0	396,000	20,000	4,600	80.0	368,000
Lewis	3,000	1,000	63.0	63,000	3,000	1,000	70.0	70,000
Skagit	2,000	300	70.0	21,000	2,000	200	70.0	14,000
Snohomish	600	300	70.0	21,000	-	-	-	-
Whatcom	1,600	100	80.0	8,000	2,000	200	75.0	15,000
Other Co.	2,300	300	80.0	24,000	3,000	500	80.0	40,000
Total	28,000	6,500	82.0	533,000	30,000	6,500	78.0	507,000
Central								
Benton	300	100	50.0	5,000	300	200	45.0	9,000
Chelan	300	200	50.0	10,000	200	100	40.0	4,000
Kittitas	2,400	1,200	90.0	108,000	2,300	1,000	78.0	78,000
Klickitat	900	200	70.0	14,000	1,500	600	80.0	48,000
Okanogan	1,300	1,000	55.0	55,000	1,300	800	55.0	44,000
Yakima	1,300	300	90.0	27,000	1,400	300	80.0	24,000
Total	6,500	3,000	73.0	219,000	7,000	3,000	69.0	207,000
Northeast								
Ferry	800	400	50.0	20,000	1,000	300	60.0	18,000
Pend Oreille	2,700	2,000	55.0	110,000	2,000	1,500	50.0	75,000
Spokane	15,000	8,000	66.0	528,000	11,000	5,700	70.0	399,000
Stevens	8,500	5,600	59.6	334,000	9,000	4,500	64.0	288,000
Total	27,000	16,000	62.0	992,000	23,000	12,000	65.0	780,000
East Central								
Adams	500	300	50.0	15,000	1,300	1,000	63.0	63,000
Douglas	3,000	2,500	46.0	115,000	5,800	5,700	60.0	342,000
Franklin	600	200	65.0	13,000	500	200	55.0	11,000
Grant	3,500	1,900	66.3	126,000	2,000	500	56.0	28,000
Lincoln	1,400	1,100	66.4	73,000	4,400	2,600	60.0	156,000
Total	9,000	6,000	57.0	342,000	14,000	10,000	60.0	600,000
Southeast								
Asotin	-	-	-	-	200	200	50.0	10,000
Columbia	600	500	72.0	36,000	1,600	1,600	75.0	120,000
Garfield	500	400	70.0	28,000	700	700	70.0	49,000
Walla Walla	500	400	60.0	24,000	800	800	65.0	52,000
Whitman	2,900	2,200	61.8	136,000	2,700	2,200	70.0	154,000
Total	4,500	3,500	64.0	224,000	6,000	5,500	70.0	385,000
State Total	75,000	35,000	66.0	2,310,000	80,000	37,000	67.0	2,479,000

- Not Applicable.

CORN

Corn for grain acres, yield and production remained constant from 1987 to 1988. The yield of 170.0 bushels per acre has been the same since 1986. Harvested acreage and yield increases in the central region of the State were offset by decreases in the acres of corn harvested for grain and yield in the northeastern region. Corn for silage acres, yield and production also remained at the same level as 1987. Decreases in acreage harvested for silage in the central and northeastern regions were balanced by an acreage increase in the western region in 1988.

**Corn For Grain
Acreage, Production and Price**

Year	Acres Harvested	Yield Per Acre	Production	Season Avg. Price
	1,000	Bushels	1,000 Bushels	Dollars/ Bushel
1979	97	123	11,931	2.93
1980	88	125	11,000	3.84
1981	114	130	14,820	3.05
1982	160	150	24,000	3.00
1983	110	160	17,600	3.62
1984	150	155	23,250	3.00
1985	135	160	21,600	2.65
1986	120	170	20,400	1.80
1987	80	170	13,600	2.15
1988	80	170	13,600	3.00

**Corn for Silage
Acreage, Production and Price**

Year	Acres Harvested	Yield Per Acre	Production	Season Avg. Price
	1,000	Tons	1,000 Tons	Dollars/ Ton
1979	50	22	1,100	25.00
1980	57	21	1,197	23.00
1981	49	21	1,029	23.50
1982	60	22	1,320	23.00
1983	50	23	1,150	25.00
1984	50	23	1,150	23.00
1985	55	22	1,210	22.00
1986	50	24	1,200	22.50
1987	40	25	1,000	22.00
1988	40	25	1,000	24.00

Corn Grain Stocks

Crop Year	January *			April *			June *			October *		
	On- Farm	Off- Farm	Total	On- Farm	Off- Farm	Total	On- Farm	Off- Farm	Total	On- Farm	Off- Farm	Total
1,000 Bushels												
1979	4,057	5,986	10,043	1,909	5,590	7,499	954	4,812	5,766	358	4,137	4,495
1980	3,850	4,132	7,982	2,310	5,853	8,163	1,430	1,945	3,375	330	2,471	2,801
1981	5,928	6,449	12,377	2,519	5,633	8,152	1,482	1,681	3,163	1,186	391	1,577
1982	6,720	3,552	10,272	3,600	3,023	6,623	1,920	1,727	3,647	960	2,172	3,132
1983	5,280	8,232	13,512	3,168	6,748	9,916	1,760	6,356	8,116	158	1,396	1,554
1984	7,440	11,393	18,833	2,093	5,422	7,515	1,163	1,593	2,756	116	944	1,060
1985	4,320	8,549	12,869	1/	4,712	1/	1/	2,433	1/	1/	2,170	1/
1986 2/	1/	9,126	1/	1/	6,125	1/	1/	5,112	1/	1/	6,301	1/
1987 2/	1/	10,698	1/	1/	7,749	1/	1/	3,840	1/	1/	NA	1/
1988 2/	1/	9,165	1/	1/	4,841	1/	1/	4,966	1/	1/	NA	1/

1/ Not published to avoid disclosure of individual reports.

2/ Survey dates changed to December 1, March 1, June 1, and September 1 beginning with the 1986 crop.

* Following year.

Corn for Grain by County

County and District	1987				1988			
	Acreage		Yield Per Acre	Production	Acreage		Yield Per Acre	Production
	Planted All Purpose	Harvested For Grain			Planted All Purpose	Harvested For Grain		
	Acres		Bushels		Acres		Bushels	
West								
Other Co.	23,500	0	.0	0	24,000	0	.0	0
Total	23,500	0	.0	0	24,000	0	.0	0
Central								
Benton	25,300	23,700	201.0	4,764,000	29,900	27,000	201.0	5,427,000
Kittitas	400	300	150.0	45,000	400	300	150.0	45,000
Klickitat	600	400	150.0	60,000	600	400	150.0	60,000
Okanogan	200	0	.0	0	200	0	.0	0
Yakima	13,500	7,700	151.4	1,166,000	8,900	4,800	134.0	643,000
Total	40,000	32,100	188.0	6,035,000	40,000	32,500	190.0	6,175,000
Northeast								
Other Co.	1,000	800	165.0	132,000	500	400	90.0	36,000
Total	1,000	800	165.0	132,000	500	400	90.0	36,000
East Central								
Adams	7,200	6,000	140.0	840,000	7,200	6,000	136.0	816,000
Franklin	20,000	18,600	166.0	3,088,000	18,000	16,100	170.0	2,736,500
Grant	21,500	16,500	145.5	2,401,000	23,500	19,000	144.0	2,735,500
Lincoln	300	0	.0	0	300	0	.0	0
Total	49,000	41,100	154.0	6,329,000	49,000	41,100	153.0	6,288,000
Southeast								
Walla Walla	6,500	6,000	184.0	1,104,000	6,500	6,000	183.5	1,101,000
Total	6,500	6,000	184.0	1,104,000	6,500	6,000	183.5	1,101,000
State Total	120,000	80,000	170.0	13,600,000	120,000	80,000	170.0	13,600,000

Corn for Silage by County

County and District	1987				1988			
	Acreage		Yield Per Acre	Production	Acreage		Yield Per Acre	Production
	Planted All Purpose	Harvested For Silage			Planted All Purpose	Harvested For Silage		
	Acres		Tons		Acres		Tons	
West								
Clark	2,400	2,400	19.0	45,500	2,500	2,500	21.0	52,500
Cowlitz	800	800	18.0	14,400	1,300	1,300	20.0	26,000
Grays Harbor	500	500	23.0	11,500	800	800	15.0	12,000
Island	600	600	19.0	11,400	500	500	19.0	9,500
King	1,000	1,000	24.0	24,000	1,000	1,000	25.0	25,000
Lewis	1,000	1,000	19.0	19,000	1,200	1,200	20.0	24,000
Pierce	700	700	25.0	17,500	700	700	23.0	16,100
Skagit	5,600	5,600	23.0	129,000	5,600	5,600	23.0	129,000
Snohomish	3,600	3,600	24.0	86,500	3,600	3,600	22.0	79,100
Thurston	200	200	22.0	4,400	200	200	20.0	4,000
Wahkiakum	400	400	25.0	10,000	400	400	20.0	8,000
Whatcom	6,500	6,500	25.0	162,800	6,000	6,000	27.0	161,800
Other Co.	200	200	25.0	5,000	200	200	25.0	5,000
Total	23,500	23,500	23.0	541,000	24,000	24,000	23.0	552,000
Central								
Benton	25,300	1,600	31.0	49,600	29,900	2,900	31.0	89,900
Kittitas	400	100	28.0	2,800	400	100	25.0	2,500
Klickitat	600	200	22.0	4,400	600	200	20.0	4,000
Okanogan	200	200	20.0	4,000	200	200	20.0	4,000
Yakima	13,500	5,800	29.0	168,200	8,900	4,100	28.0	114,600
Total	40,000	7,900	29.0	229,000	40,000	7,500	28.7	215,000
Northeast								
Other Co.	1,000	200	20.0	4,000	500	100	20.0	2,000
Total	1,000	200	20.0	4,000	500	100	20.0	2,000
East Central								
Adams	7,200	1,200	26.0	31,200	7,200	1,200	29.0	34,800
Franklin	16,900	1,400	32.0	44,800	18,000	1,900	28.0	53,200
Grant	24,600	5,000	26.0	130,100	23,500	4,500	28.0	125,800
Lincoln	300	300	23.0	6,900	300	300	24.0	7,200
Total	49,000	7,900	27.0	213,000	49,000	7,900	28.0	221,000
Southeast								
Walla Walla	6,500	500	26.0	13,000	6,500	500	20.0	10,000
Total	6,500	500	26.0	13,000	6,500	500	20.0	10,000
State Total	120,000	40,000	25.0	1,000,000	120,000	40,000	25.0	1,000,000

HAY

Cool, dry weather early in the season slowed development of the 1988 hay crop. However, warmer temperatures in June aided harvest. Harvested acreage for all hay in 1988 was 800,000 acres, up 40,000 acres from 1987. Alfalfa hay acreage accounted for most of the increase with 490,000 acres harvested in 1988 compared with 460,000 acres in 1987. There was a slight decrease in the alfalfa hay yield from 4.3 ton per acres in 1987 to 4.2 ton per acre in 1988. Other hay harvested acreage was 310,000 acres in 1988, up from 300,000 acres in 1987. The other hay yield experienced a slight increase from 2.4 tons per acre in 1987 to 2.5 tons per acre in 1988.

Drought conditions in many areas increased the demand for all types of hay in 1988. The average price per ton for all hay in 1988 was \$78.50, an increase of \$24 per ton from the 1987 price per ton of \$54.50 per ton.

Alfalfa Hay

Year	Acres Harvested	Yield Per Acre	Production
	1,000 Acres	Tons	1,000 Tons
1979	503	3.6	1,811
1980	505	3.7	1,850
1981	500	3.7	1,813
1982	460	4.0	1,840
1983	440	4.0	1,760
1984	475	4.3	2,043
1985	450	3.9	1,755
1986	470	4.2	1,974
1987	460	4.3	1,978
1988	490	4.2	2,058

Hay Other

Year	Acres Harvested	Yield Per Acre	Production
	1,000 Acres	Tons	1,000 Tons
1979	350	2.0	683
1980	360	2.1	756
1981	355	2.0	746
1982	340	2.3	782
1983	350	2.5	875
1984	325	2.7	878
1985	350	2.4	840
1986	360	2.5	900
1987	300	2.4	720
1988	310	2.5	775

Acreage, Production, Price, and Stocks

Crop Year	Acres Harvested	Yield Per Acre	Production	Season Avg. Price	Stocks	
					Jan. 1	May 1 *
	1,000 Acres	Tons	1,000 Tons	\$/Ton	1,000 Tons	
1979	853	2.92	2,494	71.00	1,621	424
1980	865	3.03	2,606	82.50	1,720	573
1981	855	2.97	2,559	67.00	1,663	512
1982	800	3.28	2,622	77.00	1,337	262
1983	790	3.34	2,635	78.50	1,528	237
1984	800	3.65	2,921	80.50	1,490	158
1985	800	3.24	2,595	84.50	1,246	182
1986 1/	830	3.46	2,874	60.00	1,868	517
1987 1/	760	3.55	2,698	54.50	2,104	405
1988 1/	800	3.54	2,833	78.50	1,700	312

1/ Survey reference date for hay stocks was changed from January 1 to December 1 for 1986 crop.

* Following calendar year.

Hay by County, 1987

County and District	Alfalfa			Other Hay			All Hay		
	Harvested	Yield Per Acre	Production	Harvested	Yield Per Acre	Production	Harvested	Yield Per Acre	Production
	Acres	Tons		Acres	Tons		Acres	Tons	
West									
Clallam	2,900	4.00	11,600	3,200	2.50	8,000	6,100	3.21	19,600
Clark	2,500	3.32	8,300	10,000	2.30	23,000	12,500	2.50	31,300
Cowlitz	200	3.00	600	4,200	2.50	10,500	4,400	2.52	11,100
Grays Harbor	100	4.00	400	12,000	2.90	34,800	12,100	2.91	35,200
Island	1,800	2.50	4,500	4,000	1.70	6,800	5,800	1.95	11,300
Jefferson	100	4.00	400	2,500	1.60	4,000	2,600	1.69	4,400
King	100	3.00	300	8,100	2.00	16,200	8,200	2.01	16,500
Kitsap	-	-	-	1,200	2.00	2,400	1,200	2.00	2,400
Lewis	2,000	3.30	6,600	22,100	2.00	44,200	24,100	2.11	50,800
Mason	600	2.00	1,200	2,200	2.00	4,400	2,800	2.00	5,600
Pacific	200	2.00	400	5,200	2.50	13,000	5,400	2.48	13,400
Pierce	100	3.00	300	8,000	1.90	15,200	8,100	1.91	15,500
San Juan	100	3.00	300	3,500	1.60	5,600	3,600	1.64	5,900
Skagit	200	3.00	600	21,500	2.20	47,300	21,700	2.21	47,900
Skamania	200	2.50	500	500	2.00	1,000	700	2.14	1,500
Snohomish	200	3.50	700	17,000	2.40	40,800	17,200	2.41	41,500
Thurston	200	4.00	800	11,000	2.00	22,000	11,200	2.04	22,800
Wahkiakum	100	2.00	200	2,500	2.00	5,000	2,600	2.00	5,200
Whatcom	2,400	5.00	12,000	41,000	2.60	106,600	43,400	2.73	118,600
Total	14,000	3.55	49,700	179,700	2.29	410,800	193,700	2.38	460,500
Central									
Benton	16,000	5.40	86,400	1,000	2.20	2,200	17,000	5.21	88,600
Chelan	3,500	2.40	8,400	1,000	2.00	2,000	4,500	2.31	10,400
Kittitas	11,000	5.60	61,600	28,500	4.00	114,000	39,500	4.45	175,600
Klickitat	33,000	4.00	132,000	2,500	2.20	5,500	35,500	3.87	137,500
Okanogan	24,000	4.10	98,400	5,200	1.50	7,800	29,200	3.64	106,200
Yakima	30,000	4.80	144,000	7,000	2.70	18,900	37,000	4.40	162,900
Total	117,500	4.52	530,800	45,200	3.33	150,400	162,700	4.19	681,200
Northeast									
Ferry	10,000	2.70	27,000	2,000	1.50	3,000	12,000	2.50	30,000
Pend Oreille	6,000	2.60	15,600	16,500	1.60	26,400	22,500	1.87	42,000
Spokane	50,000	2.60	130,000	22,000	2.30	50,600	72,000	2.51	180,600
Stevens	43,000	2.70	116,100	8,000	1.70	13,600	51,000	2.54	129,700
Total	109,000	2.65	288,700	48,500	1.93	93,600	157,500	2.43	382,300
East Central									
Adams	17,000	6.10	103,700	3,500	3.60	12,600	20,500	5.67	116,300
Douglas	6,000	3.40	20,400	2,700	2.00	5,400	8,700	2.97	25,800
Franklin	61,000	6.30	384,300	600	3.00	1,800	61,600	6.27	386,100
Grant	92,000	4.60	423,200	4,000	3.50	14,000	96,000	4.55	437,200
Lincoln	12,000	3.00	36,000	7,000	2.40	16,800	19,000	2.78	52,800
Total	188,000	5.15	967,600	17,800	2.84	50,600	205,800	4.95	1,018,200
Southeast									
Asotin	1,100	2.00	2,200	900	1.00	900	2,000	1.55	3,100
Columbia	1,300	4.00	5,200	1,000	2.30	2,300	2,300	3.26	7,500
Garfield	1,100	4.00	4,400	1,000	1.50	1,500	2,100	2.81	5,900
Walla Walla	9,000	5.30	47,700	1,500	2.20	3,300	10,500	4.86	51,000
Whitman	19,000	4.30	81,700	4,400	1.50	6,600	23,400	3.77	88,300
Total	31,500	4.48	141,200	8,800	1.66	14,600	40,300	3.87	155,800
State Total	460,000	4.30	1,978,000	300,000	2.40	720,000	760,000	3.55	2,698,000

Hay by County, 1988

County and District	Alfalfa			Other Hay			All Hay		
	Harvested	Yield Per Acre	Production	Harvested	Yield Per Acre	Production	Harvested	Yield Per Acre	Production
	Acres	Tons		Acres	Tons		Acres	Tons	
West									
Clallam	3,400	3.50	11,900	3,300	2.45	8,100	6,700	2.99	20,000
Clark	2,500	3.00	7,500	10,300	2.40	24,700	12,800	2.52	32,200
Cowlitz	300	4.00	1,200	4,500	3.00	13,500	4,800	3.06	14,700
Grays Harbor	200	4.00	800	12,000	2.50	30,000	12,200	2.52	30,800
Island	2,200	3.00	6,600	4,000	1.60	6,400	6,200	2.10	13,000
Jefferson	100	4.00	400	2,500	1.60	4,000	2,600	1.69	4,400
King	600	3.00	1,800	8,400	2.10	17,600	9,000	2.16	19,400
Kitsap	100	2.00	200	1,200	2.00	2,400	1,300	2.00	2,600
Lewis	2,100	4.00	8,400	22,800	2.10	47,900	24,900	2.26	56,300
Mason	200	2.00	400	2,300	2.30	5,300	2,500	2.28	5,700
Pacific	400	2.00	800	5,700	3.00	17,100	6,100	2.93	17,900
Pierce	400	3.00	1,200	8,300	2.00	16,600	8,700	2.05	17,800
San Juan	200	2.50	500	3,500	2.00	7,000	3,700	2.03	7,500
Skagit	700	3.00	2,100	22,200	2.30	51,000	22,900	2.32	53,100
Skamania	300	3.00	900	500	2.00	1,000	800	2.38	1,900
Snohomish	400	3.00	1,200	17,000	2.50	42,500	17,400	2.51	43,700
Thurston	500	4.00	2,000	11,000	2.10	23,100	11,500	2.18	25,100
Wahkiakum	400	2.50	1,000	2,800	2.50	7,000	3,200	2.50	8,000
Whatcom	3,000	4.70	14,100	41,700	2.80	116,800	44,700	2.93	130,900
Total	18,000	3.50	63,000	184,000	2.40	442,000	202,000	2.50	505,000
Central									
Benton	17,000	5.00	85,000	1,000	2.20	2,200	18,000	4.84	87,200
Chelan	4,000	3.00	12,000	1,000	2.00	2,000	5,000	2.80	14,000
Kittitas	12,000	5.00	60,000	30,400	4.25	129,100	42,400	4.46	189,100
Klickitat	33,000	3.00	99,000	2,600	2.50	6,500	35,600	2.96	105,500
Okanogan	26,000	4.00	104,100	5,800	2.00	11,600	31,800	3.64	115,700
Yakima	32,000	5.40	172,900	7,200	3.00	21,600	39,200	4.96	194,500
Total	124,000	4.30	533,000	48,000	3.60	173,000	172,000	4.10	706,000
Northeast									
Ferry	10,000	2.00	20,000	2,100	1.05	2,200	12,100	1.83	22,200
Pend Oreille	6,000	2.30	13,800	17,200	1.60	27,500	23,200	1.78	41,300
Spokane	51,000	2.40	122,200	22,700	1.80	40,900	73,700	2.21	163,100
Stevens	46,000	2.50	115,000	8,000	1.80	14,400	54,000	2.40	129,400
Total	113,000	2.40	271,000	50,000	1.70	85,000	163,000	2.18	356,000
East Central									
Adams	19,000	5.20	98,800	3,500	3.40	11,900	22,500	4.92	110,700
Douglas	6,000	3.80	22,800	2,500	2.00	5,000	8,500	3.27	27,800
Franklin	61,000	5.90	360,200	600	3.00	1,800	61,600	5.88	362,000
Grant	102,000	5.20	530,700	4,100	3.80	15,600	106,100	5.15	546,300
Lincoln	13,000	2.50	32,500	7,300	2.70	19,700	20,300	2.57	52,200
Total	201,000	5.20	1,045,000	18,000	3.00	54,000	219,000	5.02	1,099,000
Southeast									
Asotin	1,000	1.90	1,900	1,000	1.50	1,500	2,000	1.70	3,400
Columbia	1,500	3.60	5,400	1,400	2.50	3,500	2,900	3.07	8,900
Garfield	1,600	3.00	4,800	1,000	1.80	1,800	2,600	2.54	6,600
Walla Walla	10,400	5.75	59,800	1,600	2.00	3,200	12,000	5.25	63,000
Whitman	19,500	3.80	74,100	5,000	2.20	11,000	24,500	3.47	85,100
Total	34,000	4.29	146,000	10,000	2.10	21,000	44,000	3.80	167,000
State Total	490,000	4.20	2,058,000	310,000	2.50	775,000	800,000	3.54	2,833,000

DRY BEANS

Dry bean harvested acreage in 1988 was 36,000 acres, 1,000 acres more than 1987. Yield, at 2,060 pounds per acre, was down 3 percent from the previous year. The average price received by farmers in Washington for dry beans in 1988 was \$28.60 per cwt., up considerably from the 1987 season average price of \$15.40 per cwt. Value of production for the 1988 crop was \$21.2 million, \$9.7 million more than a year ago. Nationally, Washington ranked seventh in dry bean production.

Dry Beans by County

County	1987				1988			
	Acreage		Yield Per Acre	Production	Acreage		Yield Per Acre	Production
	Planted	Harvested			Planted	Harvested		
	Acres		Lbs.	Cwt.	Acres		Lbs.	Cwt.
Adams	6,600	6,400	2,270	145,000	4,600	4,600	2,110	97,000
Franklin	5,600	5,300	2,300	122,000	4,100	4,100	2,200	90,000
Grant	17,400	16,900	2,280	386,000	22,200	21,500	2,170	466,000
Other Co.	6,400	6,400	1,450	93,000	6,100	5,800	1,530	89,000
Total	36,000	35,000	2,130	746,000	37,000	36,000	2,060	742,000

Acreage, Yield, Production and Price

Year	Acreage		Yield Per Acre	Production	Season Avg. Price	Value of Production
	Planted	Harvested				
	Acres		Lbs.	Cwt.	\$/Cwt.	1,000 Dollars
1979	41,000	40,000	2,000	800,000	24.00	19,200
1980	55,000	54,000	2,000	1,080,000	27.50	29,700
1981	70,000	69,000	2,000	1,380,000	18.50	25,530
1982	38,000	37,000	2,070	766,000	13.50	10,341
1983	16,000	16,000	2,220	355,000	18.30	6,497
1984	35,000	34,000	2,080	707,000	17.80	12,585
1985	34,000	33,000	2,150	710,000	18.20	12,922
1986	32,000	31,000	2,160	670,000	17.80	11,926
1987	36,000	35,000	2,130	746,000	15.40	11,488
1988	37,000	36,000	2,060	742,000	28.60	21,221

Small Red Beans

Year	Acres Harvested	Yield Per Acre	Production
	Acres	Lbs.	Cwt.
1979	14,000	2,140	300,000
1980	16,100	2,300	370,000
1981	18,900	2,100	396,000
1982	14,500	2,030	294,000
1983	7,200	2,150	155,000
1984	8,000	2,100	168,000
1985	12,700	2,260	286,000
1986	12,900	2,360	304,000
1987	6,500	2,510	163,000
1988	10,900	2,300	243,000

Pinto Beans

Year	Acres Harvested	Yield Per Acre	Production
	Acres	Lbs.	Cwt.
1979	16,200	1,890	306,000
1980	26,800	1,800	498,000
1981	31,700	2,030	643,000
1982	12,600	2,030	256,000
1983	3,400	2,290	78,000
1984	10,200	2,140	214,000
1985	9,200	2,160	199,000
1986	8,400	2,190	184,000
1987	11,200	2,220	249,000
1988	7,000	2,270	159,000

Small White Beans

Year	Acres Harvested	Yield Per Acre	Production
	Acres	Lbs.	Cwt.
1979	6,800	1,840	125,000
1980	5,700	1,750	100,000
1981	8,300	1,950	162,000
1982	6,400	2,290	147,000
1983	4,000	2,330	93,000
1984	12,000	2,000	240,000
1985	8,900	2,020	180,000
1986	3,900	2,210	86,000
1987	9,500	2,190	208,000
1988	10,800	2,180	235,000

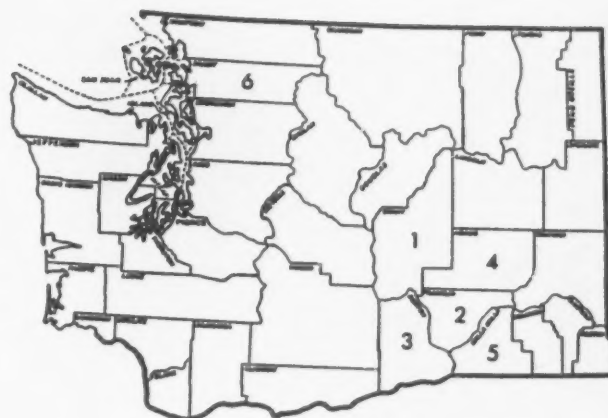
Pink Beans

Year	Acres Harvested	Yield Per Acre	Production
	Acres	Lbs.	Cwt.
1979	1,900	2,740	52,000
1980	5,200	2,080	108,000
1981	10,000	1,770	177,000
1982	3,200	1,960	63,000
1983	1,100	2,000	22,000
1984	2,500	2,080	52,000
1985	1,600	2,000	32,000
1986	2,400	2,080	50,000
1987	1,100	2,450	27,000
1988	800	2,250	18,000

POTATOES

Potato acreage in Washington, at 115,000 acres planted and harvested for 1988, fell 9,000 acres from the 1987 level of 124,000 acres. The yield in 1988 was a record 550 cwt. per acre, once again the highest in the nation. Production was 63,250,000 cwt., 3,710,000 cwt. less than the 1987 level, due to the decrease in acreage harvested.

The increase in prices in 1988 reflected the smaller total production. The average price increased 18% to \$4.30 per cwt. in 1988 bringing the value of production to \$272 million.



Potatoes: Acreage, Production, and Price

Crop Year	Acreage		Yield Per Harvested Acre	Production	Season Average Price	Value of Production
	Planted	Harvested				
	Acres		Cwt.	1,000 Cwt.	\$/Cwt.	1,000 Dol.
1969	51,000	51,000	430	21,930	1.55	33,992
1970	61,000	61,000	410	25,010	1.51	37,765
1971	58,000	58,000	395	22,910	1.40	32,074
1972	75,000	75,000	418	31,365	2.09	65,553
1973	84,000	82,000	430	35,260	2.90	102,254
1974	100,000	98,000	420	41,160	3.65	150,234
1975	107,000	105,000	460	48,300	3.15	152,145
1976	124,000	124,000	450	55,800	2.50	139,500
1977	110,000	110,000	460	50,600	2.80	141,680
1978	111,000	111,000	455	50,505	2.45	123,737
1979	102,000	102,000	475	48,450	2.55	123,548
1980	87,000	87,000	505	43,935	4.40	193,314
1981	108,000	108,000	490	52,920	3.95	209,034
1982	110,000	110,000	480	52,800	3.75	198,000
1983	104,000	104,000	520	54,080	4.25	229,840
1984	116,000	115,000	495	56,925	5.15	293,164
1985	127,000	126,000	505	63,630	3.45	219,524
1986	119,000	118,000	525	61,950	4.30	266,385
1987	124,000	124,000	540	66,960	3.65	244,404
1988	115,000	115,000	550	63,250	4.50	284,625

Potatoes Used for Processing 1/

Area and Storage Season	Accumulated as of:						Entire Season
	Dec. 1	Jan. 1	Feb. 1	Mar. 1	Apr. 1	May 1	
	1,000 Cwt.						
Washington and Other Area, Oregon							
1986-87	21,530	25,510	28,530	33,595	39,610	44,865	56,910
1987-88	22,265	25,950	30,790	35,800	40,900	44,925	58,085
1988-89	19,200	23,450	27,275	31,960	37,625	41,940	51,555
Maine 2/							
1986-87	2,100	2,835	3,345	3,865	4,500	5,195	6,995
1987-88	1,770	2,440	3,145	3,745	4,410	4,865	6,745
1988-89	1,685	2,190	2,830	3,455	4,230	4,915	6,915
Idaho & Malheur Co. Oregon							
1986-87	13,200	17,980	21,910	27,070	33,360	38,970	55,470
1987-88	18,260	23,320	28,680	34,340	40,380	46,440	64,495
1988-89	18,740	24,270	29,420	34,720	41,360	48,080	64,425
Other States 3/							
1986-87	6,240	8,405	10,330	12,320	14,690	16,750	20,975
1987-88	5,750	7,370	9,200	11,250	13,305	15,270	20,155
1988-89	5,805	7,450	9,040	10,645	12,340	14,075	18,385
Eight State Total							
1986-87	43,070	54,730	64,115	76,850	92,160	105,780	140,350
1987-88	48,045	59,080	71,815	85,135	98,995	111,500	149,480
1988-89	45,430	57,360	68,565	80,780	95,555	109,010	141,280

1/ Total quantity received and used for processing, regardless of the state in which the potatoes were produced.

2/ Includes Maine grown potatoes only.

3/ Michigan, Minnesota, North Dakota, and Wisconsin.

Fall Potato Production and Stocks

State and Crop Year	Production	Stocks					
		Dec. 1	Jan. 1*	Feb. 1*	Mar. 1*	Apr. 1*	May 1*
		1,000 Cwt.					
Idaho							
1986	90,220	70,500	63,000	57,000	50,000	40,000	27,500
1987	99,710	72,500	65,000	57,000	49,000	40,000	27,500
1988	102,610	74,000	65,500	58,000	50,500	40,500	27,000
Oregon							
1986	23,172	17,000	14,900	12,700	10,100	7,800	5,800
1987	25,924	17,900	16,100	14,200	11,800	9,500	7,500
1988	20,735	15,300	13,100	11,100	8,700	6,300	4,500
Washington							
1986	61,950	32,300	28,000	24,400	20,400	14,600	8,700
1987	66,960	36,600	32,900	28,300	22,800	17,500	12,600
1988	63,250	36,700	32,100	27,700	22,500	16,200	10,700
Total 15 Major States							
1986	307,501	209,280	180,800	154,490	128,700	95,090	59,790
1987	335,607	224,610	195,750	166,690	138,380	107,750	70,020
1988	305,623	206,420	177,750	151,050	124,485	92,585	59,355

* Calendar year following year of production.

1988 WASHINGTON AND U.S. POTATO PRODUCTION

Washington: Potato growers produced 63.25 million cwt. for the 1988 crop, 6% less than 1987, but 2% more than 1986. Yields for the State averaged a record 550 cwt./acre, 10 cwt. higher than last year's record high. Harvested acreage, at 115,000 acres was down 9,000 acres from a year ago. Information reported by Washington growers during the potato objective yield survey showed that Russet Burbank was the leading variety with 78.9% of the planted acreage, compared with 86.9% in 1987. Other leading varieties for the 1988 crop were: Russet Norkota 6.3%, Russet Norgold 2.9%, and White Norchip 2.3%.

United States: Fall potato production for 1988 was 313.6 million cwt., down 9 percent from 1987 and 1 percent below the 1986 crop. Harvested acreage was 1.08 million acres, a drop of 1 percent from 1987. The average yield was 292 cwt. per acre, down 7 percent from the 1987 record high. Drought reduced yields sharply in the North Central States. Also, smaller sizes of tubers were reported in several states.

Potato Acreage, Yield, and Production

Seasonal Group and State	Area Harvested		Yield		Production		
	1987	1988	1987	1988	1986	1987	1988
	1,000 Acres		Cwt.		1,000 Cwt.		
Winter Total	11.7	12.3	214	213	2,991	2,501	2,616
Spring Total	82.8	79.8	229	252	19,865	18,988	20,110
Summer Total	100.5	91.8	227	220	20,689	22,833	20,154
Fall							
California	18.3	16.5	430	370	6,885	7,869	6,105
Colorado	60.0	59.5	325	320	18,810	19,500	19,040
Connecticut	.5	.6	245	225	212	123	135
Id-10 SW Co	18.0	18.0	400	400	6,120	7,200	7,200
-Other Co	319.0	329.0	290	290	84,100	92,510	95,410
Indiana	5.0	4.2	250	180	990	1,250	756
Maine	83.0	80.0	280	275	21,930	23,240	22,000
Massachusetts	2.8	2.6	235	220	667	658	572
Michigan	36.0	34.0	270	230	9,625	9,720	7,820
Minnesota	71.0	69.0	230	175	13,650	16,330	12,075
Montana	7.9	7.7	300	280	2,233	2,370	2,156
Nebraska	7.5	7.6	290	280	1,794	2,175	2,128
Nevada	8.0	8.0	340	310	3,150	2,720	2,480
N.Y.-Long Is	9.7	8.3	250	240	2,964	2,425	1,992
-Up-State	25.0	24.0	250	200	5,288	6,250	4,800
North Dakota	130.0	135.0	185	115	21,600	24,050	15,525
Ohio	9.8	8.7	230	195	2,522	2,254	1,697
OR-Malhuer Co	6.8	6.4	410	375	2,380	2,788	2,400
-Other Co	48.2	38.6	480	475	20,792	23,136	18,335
Pennsylvania	21.5	20.5	220	180	5,160	4,730	3,690
Rhode Island	1.5	1.2	175	250	384	263	300
S. Dakota	11.0	10.0	210	160	2,520	2,310	1,600
Utah	6.6	6.6	240	245	1,760	1,584	1,617
Vermont 1/					20		
Washington	124.0	115.0	540	550	61,950	66,960	63,250
Wisconsin	65.0	62.5	340	320	20,125	22,100	20,000
Wyoming	2.3	1.9	210	250	567	483	475
FALL TOTAL	1,098.4	1,075.4	314	292	318,198	344,998	313,558
U.S. TOTAL	1,293.4	1,259.3	301	283	361,743	389,320	356,438

1/ Estimates discontinued in 1987.

Potatoes by County

County and District	1987				1988			
	Acreage		Yield Per Acre	Production	Acreage		Yield Per Acre	Production
	Planted	Harvested			Planted	Harvested		
	Acres		Cwt.	1,000 Cwt.	Acres		Cwt.	1,000 Cwt.
West								
Clark	500	500	330	165	500	500	320	160
Grays Harbor	200	200	280	56	-	-	-	-
Skagit	3,400	3,400	345	1,173	3,200	3,200	385	1,232
Snohomish	500	500	400	200	-	-	-	-
Whatcom	1,200	1,200	311	373	1,200	1,200	310	372
Other Counties	200	200	290	58	600	600	360	216
Total	6,000	6,000	338	2,025	5,500	5,500	360	1,980
Central								
Benton	22,700	22,700	565	12,821	20,800	20,800	610	12,687
Kittitas	1,100	1,100	420	462	1,100	1,100	350	385
Klickitat	1,200	1,200	460	552	800	800	300	240
Yakima	1,400	1,400	318	445	1,200	1,200	390	468
Other Counties	100	100	300	30	100	100	300	30
Total	26,500	26,500	540	14,310	24,000	24,000	575	13,810
Northeast								
Stevens	300	300	333	100	300	300	350	105
Other Counties	200	200	300	60	200	200	325	65
Total	500	500	320	160	500	500	340	170
East Central								
Adams	17,300	17,300	560	9,680	15,500	15,500	570	8,835
Franklin	30,000	30,000	555	16,650	28,000	28,000	555	15,540
Grant	35,400	35,400	553	19,560	34,200	34,200	550	18,805
Other Counties	300	300	450	135	300	300	400	120
Total	83,000	83,000	555	46,025	78,000	78,000	555	43,300
Southeast								
Walla Walla	8,000	8,000	555	4,440	7,000	7,000	570	3,990
Total	8,000	8,000	555	4,440	7,000	7,000	570	3,990
State Total	124,000	124,000	540	66,960	115,000	115,000	550	63,250

- Not Applicable

MINT

Washington continues to be the leader in spearmint oil production in the United States. Growers produced 1.26 million pounds of spearmint oil in 1988, accounting for 72 percent of the total U.S. production. Production decreased 10 percent due to reduction in average yield of 8 pounds to 130 pounds per acre in 1988 and a decrease of 500 acres harvested in 1988. The State yield per acre was 53 pounds greater than the national average of 77 pounds per acre. The average price for both Native and Scotch Spearmint were higher, although the State average spearmint price of \$11.60 per pound was less than the national average of \$12.70 per pound.

Washington ranks second in the U.S. behind Oregon in peppermint oil production. Washington growers accounted for 26 percent of the total U.S. production, while Oregon accounted for 53 percent of the national production. Washington growers had the highest average yield in the U.S. at 86.0 pounds per acre, 19 pounds above the national average. The average price rose significantly in 1988 to \$14.10 per pound due to strong demand and improved markets. Washington's average price of \$14.10 per pound was well below the national average price of \$15.90 per pound.

Native Spearmint Acreage, Production and Price

Year	Acres Harvested	Yield Per Acre	Production	Season Avg. Price
	Acres	Pounds	1,000 Pounds	Dollars/ Pound
1979	9,200	83	764	9.00
1980	11,800	107	1,258	8.50
1981	9,300	135	1,253	7.10
1982	3,400	128	435	9.00
1983	5,000	103	515	9.40
1984	6,800	115	784	10.00
1985	9,000	125	1,125	9.50
1986	8,000	156	1,244	9.00
1987	5,900	149	879	9.70
1988	5,800	142	824	10.00

Peppermint Acreage, Production and Price

Year	Acres Harvested	Yield Per Acre	Production	Season Avg. Price
	Acres	Pounds	1,000 Pounds	Dollars/ Pound
1979	14,000	60	840	9.10
1980	11,600	69	800	8.50
1981	8,300	78	647	8.50
1982	8,900	80	712	8.20
1983	9,500	80	760	9.40
1984	12,400	84	1,042	10.10
1985	13,200	87	1,148	8.30
1986	10,900	89	970	8.35
1987	11,500	87	1,001	10.40
1988	16,500	86	1,419	14.10

Scotch Spearmint Acreage, Production and Price

Year	Acres Harvested	Yield Per Acre	Production	Season Avg. Price
	Acres	Pounds	1,000 Pounds	Dollars/ Pound
1979	6,800	62	420	8.10
1980	4,200	59	246	9.90
1981	3,500	59	206	11.50
1982	3,500	69	241	14.70
1983	4,400	90	397	14.70
1984	4,500	104	470	14.50
1985	5,000	96	480	14.00
1986	5,000	123	615	14.00
1987	4,300	123	529	14.00
1988	3,900	112	437	14.50

Mint by County

Crop and County	1987			1988		
	Acres Harvested	Yield Per Acre	Production	Acres Harvested	Yield Per Acre	Production
	Acres	Pounds	1,000 Pounds	Acres	Pounds	1,000 Pounds
Scotch Spearmint						
Adams	300	100.0	30	1/		
Benton	600	118.3	71	1/		
Grant	400	120.0	48	400	100.0	40
Yakima	3,000	126.7	380	2,700	114.0	308
Other	-	-	-	800	111.3	89
Total	4,300	123.0	529	3,900	112.0	437
Native Spearmint						
Adams	300	140.0	42	1/		
Benton	400	120.0	48	1/		
Grant	600	135.0	81	600	114.0	68
Yakima	4,600	153.9	708	4,700	147.0	691
Other	-	-	-	500	130.0	65
Total	5,900	149.0	879	5,800	142.0	824
All Spearmint						
Adams	600	120.0	72	600	119.1	72
Benton	1,000	119.0	119	700	117.1	82
Grant	1,000	129.0	129	1,000	108.0	108
Yakima	7,600	143.2	1,088	7,400	135.0	999
Total	10,200	138.0	1,408	9,700	130.0	1,261
Peppermint						
Adams	800	77.5	62	1,400	90.0	126
Grant	3,000	89.0	267	4,200	82.9	348
Yakima	6,800	81.1	599	9,700	88.0	854
Other 2/	900	81.1	73	1,200	76.0	91
Total	11,500	87.0	1,001	16,500	86.0	1,419

1/ Adams and Benton Counties combined to Other Counties for 1988.

2/ Other Counties include Benton and Clark Counties.

HOPS

Washington again led the Nation in the production of hops. The production was nearly 40 million pounds for the 1988 Washington crop and was over 70 percent of the U.S. supply. The production for 1988 was 6 percent more than a year earlier and was the result of more acreage being harvested with lower yields. Acreage for harvest at 23,100 acres is an increase of 15 percent more than 1987, while the per acre yield of 1,720 pounds is 140 pounds lighter than a year earlier.

The season average price of \$1.36 per pound is 4 cents a pound higher than 1987, but considerably below the 1986 price of \$1.59 per pound and the 1982-86 average price of \$1.74. The value of production for Washington hops in 1988 was \$54.1 million, 10 percent higher than 1987.

Data for 1987 and 1988 crops are presented by variety. Cluster is our most popular variety followed by Galena, Nugget, Willamette and Tettnanger. Comparisons can be made with the U.S. totals by variety to further illustrate the dominance of the Washington hop industry.

Data collection for the basic hop data is funded through the Hop Growers of America and the various state hop commissions. These basic data include the acreage strung for harvest, yield and production, plus stocks data for March 1 and September 1.

Acreage, Production and Price

Year	Washington				United States			
	Acres Harvested	Yield Per Acre	Production	Season Avg. Price	Acres Harvested	Yield Per Acre	Production	Season Avg. Price
	1,000	Pounds	1,000 Pounds	Cents/ Pound	1,000	Pounds	1,000 Pounds	Cents/ Pound
1979	22.3	1,800	40,140	95.8	31.8	1,727	54,929	97.6
1980	26.9	2,080	55,952	154.0	37.1	2,037	75,560	151.0
1981	31.3	1,900	59,470	150.0	43.1	1,836	79,140	151.0
1982	28.1	2,070	58,167	160.0	39.6	1,984	78,558	174.0
1983	26.5	1,930	51,145	180.0	36.9	1,846	68,111	193.0
1984	22.7	1,920	43,584	199.0	30.8	1,824	56,167	210.0
1985 1/	19.5	1,870	36,465	180.0	28.1	1,769	49,713	203.0
1986 1/	17.4	2,040	35,496	159.0	25.0	1,962	49,062	178.0
1987 1/	20.1	1,860	37,398	132.0	28.3	1,768	50,048	151.0
1988 1/	23.1	1,720	39,751	136.0	33.4	1,638	54,696	140.0

1/ California data is combined with Washington's to avoid disclosure of individual operations.

Hop Stocks

Year	March 1				September 1			
	Stocks Held By 1/			Total Stocks	Stocks Held By 1/			Total Stocks
	Growers	Dealers	Brewers		Growers	Dealers	Brewers	
	2/				2/			
1,000 Lbs.								
1980	0	14,700	47,300	62,000	0	1,380	31,420	32,800
1981	250	16,360	50,410	67,020	240	1,950	32,240	34,430
1982	1,400	16,000	54,290	71,690	1,200	2,090	43,740	47,030
1983	1,600	16,670	62,050	80,320	1,380	3,000	56,700	61,080
1984	1,360	19,530	79,440	100,330	1,360	6,256	60,480	68,096
1985	1,660	15,196	72,949	89,805	1,400	10,930	58,130	70,460
1986	1,960	15,720	72,240	89,920	1,390	8,930	60,630	70,950
1987	1,670	13,970	72,860	88,500	1,620	6,580	62,430	70,630
1988	1,950	13,640	66,980	82,570	1,750	9,160	49,090	60,000
1989	2,080	21,790	56,630	80,500	3/	8,500	43,200	51,700

1/ Includes equivalent pounds of dry hops held in form of extract or pellets.

2/ Includes growers' stocks held in extract form.

3/ Included in dealers stocks to avoid disclosure of individual operations.

Hops by State, Variety, and Total 1/

Variety/ Crop Year	Washington 2/						United States					
	Acres		Yield		Production		Acres		Yield		Production	
	1987	1988	1987	1988	1987	1988	1987	1988	1987	1988	1987	1988
	Acres		Pounds		1,000 Pounds		Acres		Pounds		1,000 Pounds	
Aquila	-	320	-	1,520	-	487	-	320	-	1,520	-	487.0
Banner	-	340	-	1,650	-	561	-	340	-	1,650	-	561.0
Cascade	1,650	920	1,920	1,990	3,168	1,831	1,650	920	1,920	1,990	3,168.0	1,831.0
Chinook	800	1,000	1,690	1,990	1,352	1,990	980	1,220	1,661	1,909	1,627.4	2,328.8
Cluster	9,900	7,950	1,960	2,030	19,382	16,100	10,410	8,440	1,954	2,014	20,345.9	16,996.7
Eroica	730	640	2,020	1,940	1,475	1,242	1,170	1,070	1,926	1,808	2,253.8	1,934.3
Fuggles	-	-	-	-	-	-	920	850	630	1,090	581.6	926.5
Galena	4,050	4,900	1,870	1,890	7,574	9,252	4,740	5,570	1,862	1,883	8,828.2	10,485.6
Nugget	1,400	1,800	1,870	1,620	2,618	2,916	2,850	3,270	1,950	1,809	5,558.0	5,914.8
Olympic	230	270	2,180	2,020	501	545	230	270	2,180	2,020	501.0	545.0
Perle	200	580	1,130	1,040	226	603	410	910	929	1,069	381.0	972.6
Tettnanger	650	2,200	830	890	540	1,958	650	2,670	830	927	540.0	2,475.0
Willamette	-	2,050	-	1,020	-	2,051	2,745	5,880	1,503	1,209	4,127.0	7,111.4
Other	490	130	1,150	1,350	562	175	1,545	1,670	1,383	1,273	2,136.1	2,126.3
Total	20,100	23,100	1,860	1,720	37,398	39,751	28,300	33,400	1,768	1,638	50,048.0	54,696.0

1/ Estimates by variety begins with the 1987 crop.

2/ California is included with Washington to avoid disclosure of individual operations.

SEED CROPS

Alfalfa seed growers had a good year in 1988. Harvested acreage, at 19,800 acres, was 800 acres more than the previous year, and the average yield for the State increased one hundred pounds to 660 pounds per acre. Thus 1988 production totaled 130,000 cwt., 23,600 cwt. more than 1987. With the season average price at \$129.00 per cwt., \$24.00 more than in 1987, the value of production for 1988 totaled \$16.8 million, an increase of \$5.6 million from a year earlier.

Harvested acreage of red clover seed, at 4,100 acres in 1988, declined 400 acres from 1987, but the average yield for Washington held steady at 490 pounds per acre. Production, at 20,000 cwt., was off slightly from a year ago, but the season average price, at \$111.00, came on very strong. The end result was a Washington red clover crop valued at \$2.2 million for 1988, a quarter of a million dollar increase over the 1987 crop. Kentucky bluegrass seed growers harvested a near record 42,500 acres in 1988, 7,500 acres more than in 1987. The record year for acres harvested was 1973 at 43,400 acres. With average yield for the State, at 410 pounds per acre, down only slightly from the previous year, 1988 production totaled 176,000 cwt., an increase of 22,000 cwt. over the 1987 crop. Even though the 1988 season average price dropped \$12.00 per cwt. from a year ago, the value of the 1988 crop, at \$20.1 million, surpassed the 1987 crop by over half a million dollars.

Acreage, Production, Price, and Value

Crop and Year	Acreage Harvested	Yield Per Acre	Production	Average Price Per Cwt	Value of Production
	Acres	Pounds	Cwt.	Dollars	1,000 Dollars
Alfalfa					
1985	21,000	670	140,700	100.40	14,127
1986	18,000	580	104,330	101.00	10,537
1987	19,000	560	106,400	105.00	11,172
1988	19,800	660	130,000	129.00	16,770
Red Clover					
1985	3,000	460	13,800	96.90	1,337
1986	3,200	460	14,720	101.00	1,487
1987	4,500	490	22,050	89.00	1,962
1988	4,100	490	20,000	111.00	2,220
Kentucky Bluegrass					
1985	34,000	240	81,600	102.40	8,356
1986	24,400	440	107,360	124.00	13,407
1987	35,000	440	154,000	126.00	19,404
1988	42,500	410	176,000	114.00	20,064
Other Grass					
1985	4,300	330	14,200	96.83	1,375
1986	1,600	450	7,200	100.00	720
1987	4,400	500	22,000	140.00	3,080
1988	6,900	304	21,000	69.00	1,449
State Total					
1985	62,300	402	250,300	100.66	25,195
1986	47,200	495	233,610	111.94	26,151
1987	62,900	484	304,450	116.99	35,618
1988	73,300	473	347,000	116.72	40,503

Alfalfa Seed by County, 1987

County	Acreage Harvested	Yield Per Acre	Production
	Acres	Cwt.	Cwt.
Franklin	1,500	7.0	10,500
Grant	3,000	6.0	18,000
Walla Walla	13,500	5.4	73,400
Other Co.	1,000	4.5	4,500
State Total	19,000	5.6	106,400

Alfalfa Seed by County, 1988

County	Acreage Harvested	Yield Per Acre	Production
	Acres	Cwt.	Cwt.
Franklin	1,800	6.1	11,000
Grant	3,200	7.5	24,000
Walla Walla	13,500	6.4	87,000
Other Co.	1,300	6.2	8,000
State Total	19,800	6.6	130,000

Kentucky Bluegrass Seed by County, 1987

County	Acreage Harvested	Yield Per Acre	Production
	Acres	Cwt.	Cwt.
Adams	700	5.0	3,500
Columbia	700	3.0	2,100
Garfield	5,100	3.0	15,300
Spokane	21,500	4.9	105,850
Walla Walla	2,500	3.5	8,750
Whitman	3,500	4.4	15,400
Other Co.	1,000	3.1	3,100
State Total	35,000	4.4	154,000

Kentucky Bluegrass Seed by County, 1988

County	Acreage Harvested	Yield Per Acre	Production
	Acres	Cwt.	Cwt.
Adams	2,700	5.6	15,000
Garfield	7,000	3.0	21,000
Spokane	24,600	4.5	111,000
Walla Walla	2,900	4.1	12,000
Whitman	3,600	3.1	11,000
Other Co.	1,700	3.5	6,000
State Total	42,500	4.1	176,000

Red Clover Seed by County, 1987

County	Acreage Harvested	Yield Per Acre	Production
	Acres	Cwt.	Cwt.
Adams	400	5.0	2,000
Clark	400	4.5	1,800
Franklin	700	5.0	3,500
Grant	2,500	4.9	12,250
Other Co.	500	5.0	2,500
State Total	4,500	4.9	22,050

Red Clover Seed by County, 1988

County	Acreage Harvested	Yield Per Acre	Production
	Acres	Cwt.	Cwt.
Adams	700	5.0	3,500
Clark	400	3.8	1,500
Franklin	500	5.0	2,500
Grant	2,000	5.0	10,000
Other Co.	500	5.0	2,500
State Total	4,100	4.9	20,000

Other Grass Seed by County, 1987

County	Acreage Harvested	Yield Per Acre	Production
	Acres	Cwt.	Cwt.
Franklin	300	7.0	2,100
Garfield	500	3.0	1,500
Lincoln	200	5.0	1,000
Spokane	2,100	5.0	10,500
Walla Walla	300	3.0	900
Other Co.	1,000	6.0	6,000
State Total	4,400	5.0	22,000

Other Grass Seed by County, 1988

County	Acreage Harvested	Yield Per Acre	Production
	Acres	Cwt.	Cwt.
Franklin	700	3.6	2,500
Garfield	600	2.5	1,500
Lincoln	900	2.8	2,500
Spokane	2,600	2.5	6,500
Walla Walla	1,100	3.6	4,000
Other Co.	1,000	4.0	4,000
State Total	6,900	3.0	21,000

FRUIT

Washington is like two states in one. The east side of the Cascade Mountains is bright and sunny, with long summer days and cool nights -- perfect for growing luscious fruit. The west side is lush and green, great for growing berries. There are two major fruit producing areas located in central Washington -- one in the south central portion including the Yakima Valley, and the other embracing the Wenatchee-Okanogan area in the north central portion. However, the Columbia Basin is gaining in importance as new plantings come into production.

Washington is the number 1 producer of apples, sweet cherries, and other pears. Other commodities, such as Bartlett pears, apricots, and prunes and plums, are among the second place ranking for the nation.

Value of fruit produced in Washington totaled a record \$712 million, 28 percent above last year and 4 percent more than the previous record set in 1986. Individual fruit commodities that established record value of production were apples, apricots, Bartlett pears, other pears, and peaches.

The value of production for Washington's fruit crops was in the low \$200 million range in the mid-1970's. The combined value increased to the \$400 million in the early 1980's and exceeded \$500 million in 1983. Increased acreage, higher producing varieties, improved management and better marketing has all contributed to the increased value of production trend. Prices are a critical factor, but they have not increased as dramatically as the production has over the past decade.

Fruit Reporting Districts (FRD)



FRUIT & NUT CROPS

Utilized Production, Price, and Value, Washington

Crop and Year	Bearing Acreage	Yield Per Acre	Total Production	Utilized Production	Average Price	Value of Utilized Production 1/
	Acres	Tons	Tons	Tons	\$/Ton	1,000 Dollars
Apples						
1984	105,000	14.05	1,475,000	1,475,000	222.00	326,220
1985	112,000	9.15	1,025,000	1,025,000	340.00	348,740
1986	126,000	12.55	1,580,000	1,580,000	310.00	488,400
1987	135,000	18.50	2,500,000	2,400,000	146.00	348,000
1988	142,000	13.75	1,950,000	1,950,000	254.00	493,650
Apricots						
1984	650	5.23	3,400	3,400	490.00	1,665
1985	700	3.43	2,400	2,400	628.00	1,508
1986	750	5.73	4,300	4,300	772.00	3,319
1987	850	4.59	3,900	3,900	709.00	2,765
1988	950	6.42	6,100	6,100	682.00	4,162
Sweet Cherries						
1984	10,900	6.24	68,000	55,800	729.00	40,654
1985	11,300	3.35	37,900	35,300	1,030.00	36,527
1986	11,900	5.25	62,500	62,500	951.00	59,437
1987	12,200	6.07	74,000	74,000	923.00	68,332
1988	12,800	4.84	62,000	62,000	983.00	60,918
Tart Cherries						
1984	-	-	-	690	964.00	665
1985	-	-	-	650	855.00	556
1986	-	-	-	900	631.00	568
1987	-	-	-	1,400	325.00	455
1988	-	-	-	1,200	360.00	432
Bartlett Pears						
1984	10,900	9.27	101,000	101,000	218.00	21,996
1985	11,300	9.82	111,000	111,000	248.00	27,484
1986	11,700	10.80	126,000	126,000	225.00	28,352
1987	12,100	14.10	171,000	171,000	189.00	32,322
1988	12,100	12.10	147,000	147,000	244.00	35,868
Other Pears						
1984	9,400	11.00	103,000	103,000	325.00	33,432
1985	9,600	11.90	114,000	114,000	365.00	41,642
1986	10,000	14.00	140,000	140,000	339.00	47,480
1987	10,800	15.30	165,000	165,000	215.00	35,395
1988	11,300	14.40	163,000	163,000	333.00	54,340

- Not available.

Utilized Production, Price, and Value, Washington (continued)

Crop and Year	Bearing Acreage	Yield Per Acre	Total Production	Utilized Production	Average Price	Value of Utilized Production 1/
	Acres	Tons	Tons	Tons	\$/Ton	1,000 Dollars
Peaches						
1984	2,400	7.90	19,000	19,000	486.00	9,239
1985	2,300	6.75	15,500	15,500	476.00	7,365
1986	2,400	8.35	20,000	20,000	456.00	9,105
1987	2,500	8.60	21,500	21,500	330.00	7,076
1988	2,600	9.60	25,000	25,000	386.00	9,660
Prunes						
1984	1,500	12.90	18,000	18,000	151.00	2,716
1985	1,400	7.29	10,200	10,200	220.00	2,240
1986	1,400	6.50	9,100	9,100	366.00	3,329
1987	1,500	8.20	12,300	12,300	134.00	1,650
1988	1,600	8.44	13,500	13,500	187.00	2,521
Grapes						
1984	26,600	6.33	168,500	168,500	124.00	20,853
1985	27,000	4.30	116,100	116,100	178.00	20,642
1986	27,900	5.59	156,000	156,000	238.00	37,120
1987	28,200	8.85	249,500	246,000	225.00	55,356
1988	29,200	6.23	182,000	182,000	245.00	44,601
Filberts						
1984	400	.50	-	200	875.00	175
1985	400	.75	-	300	957.00	287
1986	400	.50	-	200	895.00	179
1987	400	.75	-	300	1,160.00	348
1988	400	.50	-	200	891.00	178
Other 2/						
1984	-	-	-	6,500	-	3,880
1985	-	-	-	5,400	-	3,030
1986	-	-	-	9,100	-	5,750
1987	-	-	-	9,000	-	3,560
1988	-	-	-	11,600	-	5,340
State Total						
1984				1,951,090	236.53	461,495
1985				1,435,850	341.28	490,021
1986				2,108,100	324.01	683,039
1987				3,104,400	178.86	555,259
1988				2,561,600	277.82	711,670

1/ Price based at packinghouse door and processing plant door.

2/ Includes miscellaneous fruit and nuts.

- Not available.

Utilized Production by Fruit Districts, Washington

Area and Year	Apples	Apricots	Sweet Cherries	Bartlett Pears	Other Pears	Peaches	Prunes
	Tons						
West							
1984	1,000	-	130	20	-	40	40
1985	900	-	100	20	-	50	30
1986	800	-	100	20	-	70	20
1987	1,000	-	50	20	-	70	20
1988	1,500	-	50	20	-	70	20
Mid-Columbia							
1984	2,500	30	1,100	2,800	6,400	300	100
1985	2,400	30	800	2,800	6,900	400	80
1986	4,400	60	1,100	4,200	7,000	550	70
1987	7,200	60	1,200	6,400	9,000	550	60
1988	7,500	50	1,000	3,900	10,500	600	60
Wenatchee							
1984	630,000	1,600	19,300	14,000	64,000	2,600	30
1985	517,000	1,400	15,500	28,500	87,000	2,000	30
1986	600,000	1,550	17,000	24,400	96,500	2,700	40
1987	1,000,000	1,900	26,500	34,500	112,000	2,800	40
1988	680,000	2,500	27,000	33,000	107,000	2,500	40
Yakima Valley							
1984	742,000	1,500	31,500	83,500	32,100	14,900	17,100
1985	388,000	800	15,700	78,800	19,500	11,200	9,100
1986	785,000	2,200	39,000	96,000	35,700	13,900	7,900
1987	1,125,000	1,400	40,500	127,000	42,700	15,000	10,900
1988	940,000	3,100	28,200	105,000	42,900	19,100	12,100
Columbia Basin							
1984	95,000	210	3,500	500	400	860	670
1985	110,000	120	3,000	700	550	1,600	900
1986	180,000	400	5,000	1,240	750	2,500	1,000
1987	250,000	450	5,500	3,000	1,250	2,800	1,200
1988	300,000	380	5,500	5,000	2,550	2,500	1,200
Northeast							
1984	2,700	30	250	20	100	150	20
1985	3,200	30	180	20	50	150	20
1986	4,000	60	200	40	50	180	20
1987	6,800	60	100	20	50	180	20
1988	6,000	50	100	20	50	150	20
Southeast							
1984	1,800	30	20	160	-	150	40
1985	3,500	20	20	160	-	100	40
1986	5,800	30	100	100	-	100	50
1987	10,000	30	150	60	-	100	60
1988	15,000	20	150	60	-	80	60
Total							
1984	1,475,000	3,400	55,800	101,000	103,000	19,000	18,000
1985	1,025,000	2,400	35,300	111,000	114,000	15,500	10,200
1986	1,580,000	4,300	62,500	126,000	140,000	20,000	9,100
1987	2,400,000	3,900	74,000	171,000	165,000	21,500	12,300
1988	1,950,000	6,100	62,000	147,000	163,000	25,000	13,500

- Not applicable

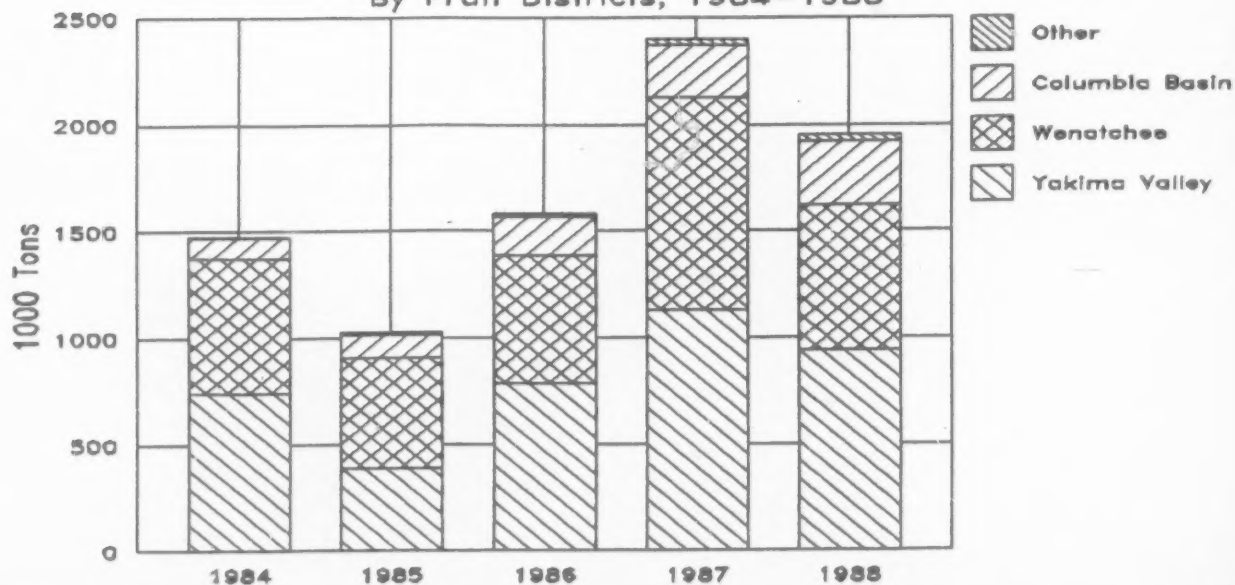
Fruit Harvest Costs, Washington

Washington fruit harvest costs were quite variable as it cost more to harvest apples, pears, and peaches during 1988. However harvesting costs for apricots, sweet cherries and prunes were less for the 1988 crops compared with 1987. Picking costs accounts for the major share of the total harvest costs. Other harvest costs include hauling, boxes and bins, and supervision.

Fruit Harvesting Costs, Washington

Year	Apples	Apricots	Sweet Cherries	Pears		Peaches	Prunes
				Bartlett	Other		
	\$/Bulk Bin			\$/Ton			
1979	11.23	45.00	194.00	22.10	23.60	42.00	41.30
1980	11.94	47.50	213.00	23.20	24.60	49.80	40.30
1981	12.54	70.50	231.00	24.20	24.20	54.40	43.60
1982	12.90	72.70	225.00	24.20	25.10	52.00	43.50
1983	12.87	73.60	233.00	24.40	24.90	54.00	44.30
1984	13.52	76.00	232.00	22.70	23.70	57.70	49.10
1985	13.90	76.00	246.00	25.40	27.50	55.80	55.40
1986	13.61	68.00	240.00	23.90	24.00	61.00	52.00
1987	14.45	87.00	247.00	23.50	24.30	58.30	53.90
1988	15.48	74.00	220.00	24.10	25.70	60.80	48.80

Utilized Apple Production By Fruit Districts, 1984-1988



APPLES

The State's apple orchards produced 3,900 million pounds (92.9 million boxes) during 1988, which is 22 percent below the record 1987 production of 5,000 million pounds (119.0 million boxes). Trees came through the winter in good condition but the set was quite variable as some trees had a good set while other trees lacked a good load. The major Red Delicious crop picked out lighter and smaller than normal but the color was excellent. A few early apples were harvested in August, but the heavy picking was done during September and October.

The 1988 crop was the second largest of record, and likewise the quantity sold for fresh market and processing were the second largest of record. However, the processing market utilized only 27 percent of the 1988 crop compared with 38 percent of the 1987 crop going for processing. Correspondingly, both the fresh market price and the processing price were much stronger for the 1988 crop, which resulted in a record value of \$494 million for apples.

Washington is the leading apple producing state with 43 percent of the nation's output. Apples, which was the State's number 1 commodity during 1986, fell to third position in 1988.

Production, Value, and Disposition

Year	Production		Average Price Per Lb.	Value of 1/ Utilized Production	Fresh Market		Processing	
	Total	Utilized			Quantity	Price/Lb.	Quantity	Price/Ton
	Million Pounds		Cents	1,000 Dollars	Million Pounds	Cents	Million Pounds	Dollars
1979	2,619	2,619	12.7	332,613	1,860	15.5	759	114.00
1980	3,005	3,005	8.2	247,695	2,250	9.7	755	77.00
1981	2,760	2,760	10.9	301,530	2,070	13.4	690	70.00
1982	2,615	2,615	9.7	252,895	2,030	10.7	585	121.00
1983	3,055	3,055	11.4	348,790	2,255	13.8	800	94.00
1984	2,950	2,950	11.1	326,220	2,172	13.3	778	96.00
1985	2,050	2,050	17.0	348,740	1,590	20.4	460	105.00
1986	3,160	3,160	15.5	488,400	2,440	18.6	720	95.60
1987	5,000	4,800	7.3	348,000	3,000	10.4	1,800	39.80
1988	3,900	3,900	12.7	493,650	2,850	15.7	1,050	88.00

1/ Prices based at packinghouse door and processing plant door.

Processed Apple Utilization

Year	Canned		Juice		Other		Total Quantity 1/
	Quantity	Price/Ton	Quantity	Price/Ton	Quantity	Price/Ton	
	Million Pounds	Dollars	Million Pounds	Dollars	Million Pounds	Dollars	Million Pounds
1979	100	132.00	491	108.00	168	121.00	759
1980	89	70.00	505	76.00	161	84.00	755
1981	97	87.00	430	65.00	163	73.00	690
1982	80	145.00	331	112.00	174	127.00	585
1983	99	112.00	440	85.00	261	102.00	800
1984	92	117.00	432	70.00	254	131.00	778
1985	80	129.00	236	78.00	144	134.00	460
1986	100	126.00	430	77.00	190	122.00	720
1987	150	73.80	1,400	32.80	250	60.00	1,800
1988	160	107.00	620	76.30	270	104.00	1,050

1/ Includes frozen and dried utilization.

Apples: Holdings in Refrigerated Warehouses

Date	Washington			Pacific Region 1/			United States		
	1986-87	1987-88	1988-89	1986-87	1987-88	1988-89	1986-87	1987-88	1988-89
Million Pounds									
Sept. 30	1,680	2,000	1,350	1,776	2,129	1,460	2,350	2,687	1,858
Oct. 31	2,418	3,409	2,845	2,537	3,618	3,001	4,143	5,390	4,601
Nov. 30	2,034	2,978	2,296	2,132	3,165	2,423	3,532	4,697	3,904
Dec. 31	1,744	2,547	1,975	1,822	2,258	2,047	2,892	3,944	3,266
Jan. 31	1,439	2,082	1,666	1,496	2,197	1,723	2,308	3,159	2,660
Feb. 28	1,138	1,665	1,380	1,178	1,749	1,423	1,721	2,418	2,095
Mar. 31	836	1,127	1,067	859	1,183	1,094	1,175	1,584	1,546
Apr. 30	583	822	807	596	864	826	752	1,093	1,069
May 31	*	*	*	367	507	552	386	552	619
Jun. 30	*	*	*	200	226	320	204	248	347
Jul. 31	*	*	*	74	79	166	75	95	175
Aug. 31	*	*	*	2	2	4	4	5	8

1/ Washington, Oregon, and California.

* Not published.

Refrigerated Space by Type of Warehouse, October 1

Storage	Cooler Space				Freezer Space				Total Space 1/			
	1981	1983	1985	1987	1981	1983	1985	1987	1981	1983	1985	1987
Million Cubic Feet												
Washington												
General Storages												
Gross Space	3.9	3.9	4.5	4.8	83	93	96	103	87	97	100	108
Usable Space	2.7	2.7	3.2	3.7	67	73	78	84	69	76	81	88
Apple Storages												
Gross Space	223	256	268	296	-	-	-	-	223	256	268	296
Usable Space	179	204	214	237	-	-	-	-	179	204	214	237
Total Storages												
Gross Space	227	260	272	301	83	93	96	103	310	353	368	404
Usable Space	181	207	217	241	67	73	78	84	248	280	295	325

1/ Total may not add due to rounding.

- Not applicable.

Cooler Capacity of Apple and Pear Storages, October 1

Storage	Washington				United States			
	1981	1983	1985	1987	1981	1983	1985	1987
1,000 Boxes					1,000 Boxes			
Apple and Pear Storages								
Controlled Atmosphere	42,954	55,086	59,384	67,641	63,815	78,506	84,733	94,622
Regular Storage	46,277	46,824	47,639	50,849	103,683	103,193	107,486	109,912
Total	89,231	101,910	107,023	118,490	167,498	181,699	192,219	204,534

1988 Washington Grape Production

Washington grape growers produced the fourth largest crop of record in 1988 at 182,000 tons which is 27 percent below last year's record of 249,500 tons. However, wine grower's output of 46,000 tons was a record level while Concord output was 136,000 tons, 34 percent below 1987's Concord crop. Concord growers received top dollar for their grapes - \$205.00 per ton as their output was over one-third less than last year while wine growers produced a record crop, but received \$364.00 per ton - \$81.00 below the 1987 price. All grapes added \$44.6 million to the State's agricultural economy, down 19 percent from last year's record of \$55.4 million.

White Riesling is still the dominant variety with one-third of the total wine grapes utilized during 1988. Generally, white variety prices have steadily declined since the beginning of the wine variety survey of 1985. However, the Chardonnay price has remained stable and even registered a 28 percent price gain for the 1988 variety. Chardonnay was the top priced variety for the 1988 survey at \$696 per ton. Red variety prices have shown a slight decline during the past four years, but production has remained stable at the 20 percent level during this period.

Prices paid for Washington wine grapes dropped to second place in the Nation at \$364 per ton for the 1988 crop. Ohio wine grapes took over the top spot with prices at \$382 per ton; however, only 1,100 tons were crushed. Washington's 1988 price is \$81 less than last year and \$286 per ton below the 1982 record price of \$650 per ton; however, only 13,000 tons were crushed during 1982. Washington is still the number two producer of premium wine grapes in the United States.

Washington Wine Grape by Variety

Variety by Color	Quantity Utilized				Average Price			
	1985	1986	1987	1988	1985	1986	1987	1988
	Tons				Dollars/Ton			
White Varieties								
White Riesling	6,400	10,100	12,300	15,200	495	460	350	181
Chardonnay	2,050	3,960	7,500	7,300	768	590	542	696
Chenin Blanc	1,710	3,060	3,970	4,850	631	530	370	207
Gewurztraminer	1,070	1,980	2,300	3,250	640	594	464	245
Semillon	870	1,550	2,820	3,220	784	666	531	371
Sauvignon Blanc	1,040	2,020	2,460	2,200	371	431	348	218
Muscat Canelli	90	310	820	750	778	625	499	401
Others	480	550	630	240	477	328	336	321
Total	13,710	23,530	32,800	37,010	574	512	423	316
Red Varieties								
Cabernet Sauvignon	1,390	2,530	2,470	3,520	651	670	600	638
Merlot	800	1,070	2,150	3,060	616	645	586	613
Pinot Noir	330	350	650	730	656	691	597	631
Lemberger	*	*	*	300	*	*	*	416
Others 1/	870	1,020	2,430	1,380	364	375	424	271
Total	3,390	4,970	7,700	8,990	657	606	540	565
State Total	17,100	28,500	40,500	46,000	573	529	445	364

* Included in other.

1/ Includes Pink Varieties

GRAPES: PRODUCTION, VALUE, AND DISPOSITION 1/

Year	Production		Average Price Per Ton 1/ Dollars	Value of Utilized Production 1,000 Dol.	Fresh Market		Processing	
	Total	Utilized			Quantity	Price/Ton	Quantity	Price/Ton
	Tons	Tons			Tons	Dollars	Tons	Dollars
Concord Grapes 2/								
1979	100,200	100,200	195	19,588	300	308	99,000	195
1980	140,200	140,200	168	23,512	400	269	139,800	167
1981	150,500	150,500	170	25,572	500	289	150,000	170
1982	155,900	155,900	147	22,849	700	500	155,200	145
1983	205,700	204,400	117	23,815	700	395	203,700	115
1984	150,700	150,700	85	12,754	500	377	150,200	84
1985	99,000	99,000	110	10,844	300	484	98,700	108
1986	127,500	127,500	173	22,043	200	200	127,300	173
1987	205,500	205,500	182	37,333	400	240	205,100	182
1988	136,000	136,000	205	27,857	300	280	135,700	205
Wine Grapes								
1979	2,600	2,600	532	4,383	-	-	2,600	532
1980	4,900	4,900	480	2,352	-	-	4,900	480
1981	8,500	8,500	533	4,350	-	-	8,500	533
1982	13,000	13,000	650	8,450	-	-	13,000	650
1983	21,300	21,300	490	10,437	-	-	21,300	490
1984	17,800	17,800	455	8,099	-	-	17,800	455
1985	17,100	17,100	573	9,798	-	-	17,100	573
1986	28,500	28,500	529	15,077	-	-	28,500	529
1987	44,000	40,500	445	18,023	-	-	40,500	445
1988	46,000	46,000	364	16,744	-	-	46,000	364
All Grapes								
1979	102,800	102,800	204	20,971	300	308	102,500	204
1980	145,100	145,100	178	25,865	400	269	144,700	178
1981	159,000	159,000	189	30,102	500	289	158,500	189
1982	168,900	168,900	185	31,299	700	500	168,200	184
1983	227,000	227,000	152	34,252	700	395	225,000	151
1984	168,500	168,500	124	20,853	500	377	168,000	123
1985	116,100	116,100	178	20,642	300	484	115,800	177
1986	156,000	156,000	238	37,120	200	200	155,800	238
1987	249,500	246,000	225	55,356	400	240	245,600	225
1988	182,000	182,000	245	44,601	300	280	181,700	245

1/ Prices based at packinghouse door and processing plant door.

2/ Includes minor quantities of American hybrids used primarily for juice. Processing segment is juice utilization.

APRICOTS

Apricot production in 1988 was 6,100 tons, the largest output since 1966 when 9,300 tons were produced. A record \$4.2 million was added to the State's fruit industry as growers received \$682 per ton, third highest price paid to growers. This is the fifth year in a row that bearing acreage has increased from a low of 500 acres from 1974 to 1979. The record for bearing acreage is 4,600 acres from 1947-1949.

Production, Value, and Disposition

Year	Production		Average Price Per Ton	Value of 1/ Utilized Production
	Total	Utilized		
	Tons		Dollars	1,000 Dol.
1979	2,500	2,500	346.00	865
1980	2,500	2,500	386.00	965
1981	1,300	1,300	593.00	771
1982	3,000	2,900	531.00	1,540
1983	2,900	2,900	604.00	1,751
1984	3,400	3,400	490.00	1,665
1985	2,400	2,400	628.00	1,508
1986	4,300	4,300	772.00	3,319
1987	3,900	3,900	709.00	2,765
1988	6,100	6,100	682.00	4,162

1/ Prices based at packinghouse door and processing plant door.

PEACHES

Peach production during 1988 was 25,000 tons, 16 percent higher than last year's output. Production at this level is the largest crop since 1966 and the record production year was 1947 at 61,550 tons. Peaches contribute a record \$9.7 million to the fruit industry. Washington is the sixth largest producer of peaches in 1988, but only accounts for 1.9 percent of the National production.

Production, Value, and Disposition

Year	Production		Average Price Per Ton	Value of 1/ Utilized Production
	Total	Utilized		
	Tons		Dollars	1,000 Dol.
1979	15,500	15,500	322.00	4,991
1980	15,500	15,500	358.00	5,549
1981	10,000	10,000	472.00	4,719
1982	13,500	13,500	446.00	6,021
1983	14,500	14,500	430.00	6,244
1984	19,000	19,000	486.00	9,239
1985	15,500	15,500	476.00	7,365
1986	20,000	20,000	456.00	9,105
1987	21,500	21,500	330.00	7,076
1988	25,000	25,000	386.00	9,660

1/ Prices based at packinghouse door and processing plant door.

SWEET CHERRY

The 1988 sweet cherry crop in Washington was the 6th largest crop of record. Bearing acreage was at a record, but the yield and production were down from 1987. Prices were strong and the fresh market price at \$1,320 was the second highest of record, exceeded only by 1985's \$1,430 per ton.

Sweet cherries added \$60.9 million to the Washington agricultural economy during 1988 which is 11 percent below the 1987 record value of \$68.3 million. Washington is the number one producer of sweet cherries with 33 percent of the National production, while Washington and Oregon account for 66 percent of the output.

Production, Value, and Disposition

Year	Production		Average Price Per Ton	Value of 1/ Utilized Production	Fresh Market		Processing	
	Total	Utilized			Quantity	Price/Ton	Quantity	Price/Ton
	Tons		Dollars	1,000 Dol.	Tons	Dollars	Tons	Dollars
1979	67,600	67,600	608.00	41,101	47,500	670.00	20,100	463.00
1980	52,000	48,300	624.00	30,139	37,200	715.00	11,100	319.00
1981	46,400	44,400	934.00	41,479	31,800	1,134.00	12,600	430.00
1982	66,000	50,800	746.00	37,888	36,100	885.00	14,700	404.00
1983	89,000	80,900	689.00	55,709	63,500	774.00	17,400	377.00
1984	68,000	55,800	729.00	40,654	42,500	868.00	13,300	283.00
1985	37,900	35,300	1,030.00	36,527	20,200	1,430.00	15,100	506.00
1986	62,500	62,500	951.00	59,437	44,100	1,140.00	18,400	498.00
1987	74,000	74,000	923.00	68,332	49,500	1,130.00	24,500	506.00
1988	62,000	62,000	983.00	60,918	39,600	1,320.00	22,400	386.00

1/ Prices based at packinghouse door and processing plant door.

Processed Cherry Utilization

Year	Canned		Brined		Other		Total Quantity
	Quantity	Price/Ton	Quantity	Price/Ton	Quantity	Price/Ton	
	Tons	Dollars	Tons	Dollars	Tons	Dollars	Tons
1979	3,600	572.00	12,800	466.00	3,700	347.00	20,100
1980	2,200	499.00	5,300	318.00	3,600	212.00	11,100
1981	1,700	645.00	7,200	418.00	3,700	353.00	12,600
1982	2,500	703.00	7,100	361.00	5,100	316.00	14,700
1983	2,700	570.00	7,100	407.00	7,600	282.00	17,400
1984	1,800	527.00	5,600	245.00	5,900	245.00	13,300
1985	3,000	714.00	7,700	534.00	4,400	315.00	15,100
1986	2,500	575.00	12,000	471.00	3,900	531.00	18,400
1987	3,800	667.00	12,500	531.00	8,200	394.00	24,500
1988	3,900	644.00	11,900	391.00	6,600	226.00	22,400

BARTLETT PEARS

Cool spring and early summer temperatures slowed fruit development for Bartlett pears. Harvest started mid-August. Bartlett pears added a record \$35.9 million to Washington's agricultural economy during 1988, even with a 14 percent decrease in production from the 1987 crop. Growers received \$244 per ton in 1988, compared with \$189 for the 1987 crop.

Production, Value, and Disposition

Year	Production		Average Price Per Ton	Value of 1/ Utilized Production	Fresh Market		Processing	
	Total	Utilized			Quantity	Price/Ton	Quantity	Price/Ton
	Tons		Dollars	1,000 Dol.	Tons	Dollars	Tons	Dollars
1979	153,000	153,000	180.00	27,540	36,300	230.00	116,700	165.00
1980	143,000	143,000	185.00	26,459	32,900	242.00	110,100	169.00
1981	144,500	144,500	147.00	21,303	42,400	199.00	102,100	126.00
1982	141,300	141,300	154.00	21,736	44,600	199.00	96,700	133.00
1983	140,800	140,800	180.00	25,325	56,400	253.00	84,400	131.00
1984	101,000	101,000	218.00	21,996	24,500	342.00	76,500	178.00
1985	111,000	111,000	248.00	27,484	33,300	389.00	77,700	187.00
1986	126,000	126,000	225.00	28,352	39,500	363.00	86,500	162.00
1987	171,000	171,000	189.00	32,322	56,000	187.00	115,000	190.00
1988	147,000	147,000	244.00	35,868	42,000	394.00	105,000	184.00

1/ Prices based at packinghouse door and processing plant door.

OTHER PEARS

Washington's other pears added a record \$54.3 million to the agricultural sector in 1988. Growers harvested 163,000 tons, second highest output and is 1 percent below the 1987 record of 165,000 tons. The price per ton was the third highest of record at \$333, and compares to the 1985 record price of \$365 per ton. Washington is the number one producing state and when combined with Oregon, these two states account for 97 percent of the winter pear production across the Nation.

Production, Value, and Disposition

Year	Production		Average Price Per Ton	Value of 1/ Utilized Production
	Total	Utilized		
	Tons		Dollars	1,000 Dol.
1979	93,000	93,000	269.00	25,017
1980	113,000	113,000	249.00	28,112
1981	130,800	130,800	260.00	34,049
1982	123,500	123,500	245.00	30,269
1983	138,000	138,000	171.00	23,648
1984	103,000	103,000	325.00	33,432
1985	114,000	114,000	365.00	41,642
1986	140,000	140,000	339.00	47,480
1987	165,000	165,000	215.00	35,395
1988	163,000	163,000	333.00	54,340

1/ Prices based at packinghouse door and processing plant door.

PRUNES

Prune production in Washington was 13,500 tons during 1988, 10 percent above last year's crop and the largest crop since 1984. There was a heavier fruit drop than normal. Harvest of some early variety prunes started in late July. Growers received \$187 per ton, which is \$53 more than the 1987 price, but \$179 below the record 1986 price. Washington is the second leading state in prune and plum production, but produces only less than 3 percent of the National supply. Oregon is ranked the number 1 state.

Production, Value, and Disposition

Year	Production		Average Price Per Ton	Value of 1/ Utilized Production	Fresh Market		Processing	
	Total	Utilized			Quantity	Price/Ton	Quantity	Price/Ton
	Tons		Dollars	1,000 Dol.	Tons	Dollars	Tons	Dollars
1979	14,700	14,700	192.00	2,822	12,100	219.00	2,600	69.10
1980	23,100	23,100	149.00	3,436	18,000	170.00	5,100	73.80
1981	14,600	14,600	116.00	1,688	11,200	133.00	3,400	58.20
1982	11,500	11,500	300.00	3,454	10,050	340.00	1,450	25.30
1983	14,700	14,700	161.00	2,374	12,100	189.00	2,600	33.30
1984	18,000	18,000	151.00	2,716	11,400	189.00	6,600	85.00
1985	10,200	10,200	220.00	2,240	7,200	284.00	3,000	64.90
1986	9,100	9,100	366.00	3,329	7,400	437.00	1,700	55.70
1987	12,300	12,300	134.00	1,650	7,600	164.00	4,700	86.00
1988	13,500	13,500	187.00	2,521	10,500	228.00	3,000	42.20

1/ Prices based at packinghouse door and processing plant door.

FILBERTS

Clark County accounts for about half of the State's filbert trees, while the remainder are located between Seattle and the Canadian border. During the past decade, production has ranged from 200 to 400 tons. In 1988, filbert producers harvested 400 tons with an average price of \$891 per ton.

Production, Value, and Disposition

Year	Utilized Production	Average Price Per Ton	Value of Utilized Production	Production		Meat Production Of Nuts Sold Shelled
				Sold In Shell	Sold Shelled	
	Tons	Dollars	1,000 Dol.	1,000 Pounds		
1979	300	970	291	230	70	60
1980	300	1,181	354	199	101	84
1981	300	770	231	200	100	80
1982	400	677	271	170	230	140
1983	200	720	144	150	50	20
1984	200	875	175	120	80	30
1985	300	957	287	250	50	20
1986	200	895	179	150	50	20
1987	300	1,160	348	150	150	60
1988	200	891	178	100	100	40

VEGETABLES

The vegetable crops in Washington set a new record high for value of production during 1988 by topping \$197 million. The 1988 value of production for all vegetables, at \$197,016,000, is 14 percent more than 1987 and is reflective of a combination of record acreages, yields, or prices for a number of crops.

The 1988 season started slowly with cool weather. Crop growth developed rapidly with the warmer temperatures of summer.

Asparagus continued the trend of being the number 1 vegetable crop and set new records for acreage, production, and price. Washington is ranked the number 2 state with 37 percent of the national production. Asparagus contributed \$47 million to the agricultural value of production.

Sweet corn is the second ranking vegetable crop and added \$33 million to the value of production. Sweet corn for processing was the second largest crop of record for production at 8.6 million cwt., exceeded only by the 1982 crop of 9.4 million cwt. Fresh market sweet corn was the same as 1987 but the price was considerably stronger, which produced a record \$5.5 million crop for 1988.

Onions accounted for nearly \$27 million. The acreage and production of both types of onions, storage and non-storage, were at record highs. However, the price for both types of onions was down from 1987.

Green peas for processing reversed the recent downward trend of acreage harvested and posted a 6,700 acre increase. However, both yield and price were down from 1987, resulting in a decrease in value of production to \$21.4 million.

Vegetable Crops: Acreage, Production and Value

Crop and Year	Acreage Harvested	Yield Per Acre	Production	1/ Average Price Per Cwt.	Value of Production	Fresh Market		Processing	
						Production	Average Price Per Cwt.	Production	Average Price Per Cwt.
	Acres	Cwt.	1,000 Cwt.	Dollars	1,000 Dol.	1,000 Cwt.	Dollars	1,000 Cwt.	Dollars
Asparagus									
1984	29,000	25	725.0	51.70	37,454	217	72.60	508	42.70
1985	29,000	28	812.0	52.30	42,443	242	68.80	570	45.25
1986	30,000	26	780.0	52.10	40,612	290	67.30	490	43.05
1987	31,000	26	806.0	49.90	40,257	237	63.30	569	44.40
1988	32,000	28	896.0	52.70	47,198	252	62.20	644	48.95
Carrots									
1984	4,300	425	1,828.0	5.99	10,941	453	16.50	1,375	2.52
1985	5,200	435	2,262.0	4.98	11,257	456	14.10	1,806	2.67
1986	5,800	415	2,407.0	5.10	12,270	481	17.10	1,926	2.10
1987	6,600	460	3,036.0	4.29	13,021	703	11.90	2,333	2.00
1988	5,600	520	2,912.0	5.98	17,412	678	16.80	2,234	2.70
Cucumbers For Pickles									
1984	1,500	223.6	335.4	8.10	2,717	-	-	335.4	8.10
1985	1,700	197.6	336.0	9.25	3,108	-	-	336.0	9.25
1986	1,700	180.0	306.0	8.00	2,448	-	-	306.0	8.00
1987	1,700	199.6	339.4	9.00	3,055	-	-	339.4	9.00
1988	1,400	204.4	286.2	9.35	2,676	-	-	286.2	9.35
Green Peas, Proc.									
1984	64,400	34.0	2,189.6	12.30	26,932	-	-	2,189.6	12.30
1985	61,500	32.0	1,968.0	12.00	23,616	-	-	1,968.0	12.00
1986	47,600	34.2	1,628.0	12.55	20,431	-	-	1,628.0	12.55
1987	41,500	41.2	1,709.8	12.70	21,714	-	-	1,709.8	12.70
1988	48,200	37.4	1,802.6	11.85	21,361	-	-	1,802.6	11.85
Lettuce, Fresh									
1984	1,100	210	231.0	14.60	3,373	231	14.60	-	-
1985	1,100	190	209.0	13.00	2,717	209	13.00	-	-
1986	1,200	180	216.0	14.70	3,175	216	14.70	-	-
1987	1,200	200	240.0	14.90	3,576	240	14.90	-	-
1988	1,400	240	336.0	15.30	5,141	336	15.30	-	-

Vegetable Crops: Acreage, Production and Value, (Continued)

Crop and year	Acreage Harvested	Yield Per Acre	Production	1/ Average Price Per Cwt.	Value of Production	Fresh Market		Processing	
						Production	Average Price Per Cwt.	Production	Average Price Per Cwt.
	Acres	Cwt.	1,000 Cwt.	Dollars	1,000 Dol.	1,000 Cwt.	Dollars	1,000 Cwt.	Dollars
Onions-Non Stge.									
1984	1,200	360	432	13.50	5,832	432	13.50	-	-
1985	1,300	300	390	17.40	6,786	390	17.40	-	-
1986	1,300	330	429	9.55	4,097	429	9.55	-	-
1987	1,400	380	532	12.90	6,863	532	12.90	-	-
1988	1,600	400	640	10.70	6,848	640	10.70	-	-
Onions-stge. 2/									
1984	4,300	450	1,935	9.07	14,512	1,935	9.07	-	-
1985	4,300	410	1,763	4.97	6,754	1,763	4.97	-	-
1986	4,400	420	1,848	12.90	19,673	1,848	12.90	-	-
1987	5,000	460	2,300	10.60	20,479	2,300	10.60	-	-
1988	5,600	450	2,520	9.40	19,928	2,520	9.40	-	-
Snap Beans-Proc.									
1984	1,100	67.0	73.8	11.15	823	-	-	73.8	11.15
1985	1,500	62.0	93.0	8.35	777	-	-	93.0	8.35
1986	1,200	81.6	98.0	10.10	990	-	-	98.0	10.10
1987	1,100	90.2	99.2	9.90	982	-	-	99.2	9.90
1988	800	91.4	73.2	9.65	706	-	-	73.2	9.65
Sweet Corn-Fresh									
1984	2,800	105	294	15.40	4,528	294	15.40	-	-
1985	3,300	110	363	13.20	4,792	363	13.20	-	-
1986	3,200	120	384	11.10	4,262	384	11.10	-	-
1987	3,200	130	416	9.31	3,873	416	9.31	-	-
1988	3,200	130	416	13.30	5,533	416	13.30	-	-
Sweet Corn-Proc.									
1984	32,900	149.4	4,915.2	3.40	16,712	-	-	4,915.2	3.40
1985	38,900	168.0	6,535.2	3.43	22,448	-	-	6,535.2	3.43
1986	35,300	167.4	5,909.2	3.43	20,269	-	-	5,909.2	3.43
1987	44,600	180.4	8,045.8	3.36	26,994	-	-	8,045.8	3.36
1988	49,200	175.0	8,610.0	3.24	27,908	-	-	8,610.0	3.24
Other-Fresh									
1984	7,900	-	1,118	-	23,558	1,118	-	-	-
1985	9,300	-	1,437	-	28,178	1,437	-	-	-
1986	10,800	-	1,546	-	30,847	1,546	-	-	-
1987	9,200	-	1,536	-	29,885	1,536	-	-	-
1988	9,000	-	1,504	-	36,505	1,504	-	-	-
Other-Proc.									
1984	3,800	-	160	-	2,300	-	-	160	-
1985	3,600	-	334	-	3,100	-	-	334	-
1986	5,200	-	322	-	3,200	-	-	322	-
1987	5,800	-	557	-	2,555	-	-	557	-
1988	5,800	-	520	-	5,800	-	-	520	-
State Total									
1984	154,300		14,237.6	-	149,682	4,680	-	9,558	-
1985	160,700		16,472.2	-	155,976	4,860	-	11,612	-
1986	147,700		15,873.2	-	162,274	5,194	-	10,679	-
1987	152,300		19,617.2	-	173,254	5,964	-	13,653	-
1988	163,800		20,516.0	-	197,016	6,346	-	14,170	-

1/ Prices based at F.O.B. (shipping point) for fresh market vegetables and at processing plant door for processing vegetables.

2/ Includes some quantities of storage crop onions harvested but not sold because of shrinkage and waste. (1984=335,000 cwt., 1985=404,000 cwt., 1986=323,000 cwt., 1987=368,000cwt., 1988=428,000 cwt.)

- Not applicable

ASPARAGUS

Washington asparagus growers produced a record breaking crop for the second consecutive year. Acreage, production and price were at record levels. Harvested acres at 32,000 was 1,000 acres more than 1987, and production for 1988 was 896,000 cwt., 11 percent more than in 1987. The average price per cwt. increased from \$49.90 in 1987 to a record \$52.70 per cwt. in 1988. The value of the crop was at an all time high with \$47,198,000, an increase of \$6.9 million from the 1987 crop.

Acreage, Production, and Value

Year	Acreage Harvested	Yield Per Acre	Production	Average Price Per Cwt.
	Acres	Cwt.	1,000 Cwt.	Dollars
1979	21,000	28	588	44.80
1980	22,200	23	511	40.90
1981	23,700	25	593	49.40
1982 1/	28,400	24	682	48.60
1983 1/	29,300	23	684	51.40
1984	29,000	25	725	51.70
1985	29,000	28	812	52.30
1986	30,000	26	780	52.10
1987	31,000	26	806	49.90
1988	32,000	28	896	52.70

1/ Estimates by Washington Asparagus Growers Association.

Asparagus, by County 1987

County	Acreage Harvested	Yield Per Acre	Production
	Acres	Cwt.	Cwt.
Benton	2,100	23.3	49,000
Yakima	11,900	29.0	345,000
Franklin	10,100	25.0	252,000
Grant	900	24.4	22,000
Walla Walla	5,500	22.9	126,000
Other Co.	500	24.0	12,000
State Total	31,000	26.0	806,000

Asparagus, by County 1988

County	Acreage Harvested	Yield Per Acre	Production
	Acres	Cwt.	Cwt.
Adams	500	24.0	12,000
Benton	1,000	30.0	30,000
Franklin	12,000	25.0	300,000
Grant	2,300	25.2	58,000
Walla Walla	4,000	29.8	119,000
Yakima	11,900	31.1	370,000
Other Co.	300	23.3	7,000
State Total	32,000	28.0	896,000

CARROTS

Harvested acreage for carrots in 1988 was 5,600 acres, a decline of 1,000 acres from 1987. This was the first decline from the previous year since 1983. However, the carrot yield was excellent at 520 cwt. per acre., up 60 cwt. per acre compared with 1987. Production was down slightly by 124,000 cwt. to 2,912,000 cwt. for the 1988 crop. The average price per cwt. was at record high \$5.98 per cwt. up 39 percent from last year. The total value of production was \$174 million, an increase of more than \$4 million from the 1987 crop.

The split between processing and fresh market remain the same as in 1987 with 77 and 23 percent respectively.

Acreage, Production, and Price

Year	Acreage Harvested	Yield Per Acre	Production	Average Price Per Cwt.
	Acres	Cwt.	1,000 Cwt.	Dollars
1979	5,000	447	2,237	3.74
1980	4,150	467	1,938	5.74
1981	4,400	400	1,760	5.56
1982	4,800	435	2,088	3.56
1983	4,000	400	1,600	5.54
1984	4,300	425	1,828	5.99
1985	5,200	435	2,262	4.98
1986	5,800	415	2,407	5.10
1987	6,600	460	3,036	4.29
1988	5,600	520	2,912	5.98

Carrots by County, 1987

County	Acreage Harvested	Yield Per Acre	Production
	Acres	Cwt.	Cwt.
Adams	100	430	43,000
Benton	300	430	129,000
Cowlitz	250	380	95,000
Franklin	2,000	480	960,000
Grant	1,300	510	663,000
Klickitat	250	460	115,000
Skagit	700	500	350,000
Thurston	400	440	176,000
Whatcom	900	380	342,000
Yakima	100	430	43,000
Other Co.	300	400	120,000
State Total	6,600	460	3,036,000

Carrots by County, 1988

County	Acreage Harvested	Yield Per Acre	Production
	Acres	Cwt.	Cwt.
Adams	100	500	50,000
Benton	300	470	141,000
Cowlitz	350	400	140,000
Franklin	1,800	490	882,000
Grant	1,200	680	816,000
Klickitat	200	480	96,000
Skagit	500	600	300,000
Thurston	300	400	120,000
Whatcom	800	500	400,000
Other Co.	350	309	108,000
State Total	5,600	520	2,912,000

SWEET CORN

Cooler than normal weather delayed early growth of sweet corn; however, crop development progressed favorably throughout the State with warmer temperatures during the season.

Harvested acres continued to increase with 52,400 acres in 1988, up 4,600 acres from 1987's 47,800 acres. Sweet corn average yield declined from 177 to 172 cwt. per acre and the average price increased slightly to \$3.70 per cwt. The increase in acreage was responsible for production increasing 7 percent from last year to slightly more than 9 million cwt., the highest since 1982.

Acreage, Production, and Value

Year	Acreage Harvested	Yield Per Acre	Production	Average Price Per Cwt.
	Acres	Cwt.	1,000 Cwt.	Dollars
1979	43,200	151	6,537	3.55
1980	39,500	160	6,324	3.27
1981	44,600	154	6,865	3.48
1982	54,600	176	9,621	3.73
1983	40,900	176	7,207	3.36
1984	35,700	146	5,209	4.08
1985	42,200	163	6,898	3.95
1986	38,500	163	6,293	3.90
1987	47,800	177	8,462	3.65
1988	52,400	172	9,026	3.70

Sweet Corn by County, 1987

County	Acreage Harvested	Yield Per Acre	Production
	Acres	Cwt.	Cwt.
Benton	3,600	188	676,000
Clark	600	163	98,000
Cowlitz	1,300	148	192,000
Franklin	5,400	172	930,000
Grant	17,400	194	3,370,000
Kittitas	4,500	193	868,000
Lewis	1,200	135	162,000
Skagit	1,200	135	162,000
Walla Walla	2,800	171	478,000
Whatcom	900	116	104,000
Yakima	8,600	161	1,385,800
Other Co.	300	120	36,000
State Total	47,800	177	8,461,800

Sweet Corn by County, 1988

County	Acreage Harvested	Yield Per Acre	Production
	Acres	Cwt.	1,000 Cwt.
Benton	4,400	170	748,000
Clark	600	140	84,000
Cowlitz	1,200	135	162,000
Franklin	5,500	165	907,500
Grant	21,000	188	3,948,000
Kittitas	3,500	190	665,000
Lewis	1,000	148	148,000
Skagit	1,000	123	123,000
Thurston	200	140	28,000
Walla Walla	4,000	170	680,000
Whatcom	1,000	140	140,000
Yakima	8,300	158	1,311,400
Other Co.	750	122	81,100
State Total	52,400	172	9,026,000

GREEN PEAS - PROCESSING

Washington green pea growers harvested 48,200 acres in 1988, up 6,700 acres from 1987. Average yield per acre dropped to 37.4 cwt. compared with 41 cwt. the previous year. Production however, increased 5 percent to 1,803 thousand cwt.

Average price per cwt. declined 7 percent to \$11.85. This resulted in the value of production falling slightly to \$21,361,000.

Acreage, Production, and Price

Year	Acreage Harvested	Yield Per Acre	Production	Average Price Per Cwt.
	Acres	Cwt.	1,000 Cwt.	Dollars
1977	81,100	34	2,790	11.10
1980	57,800	33	1,907	9.65
1981	59,600	30	1,764	10.15
1982	67,700	32	2,166	11.75
1983	65,600	30	1,955	10.25
1984	64,400	34	2,190	12.30
1985	61,500	32	1,968	12.00
1986	47,600	34	1,628	12.55
1987	41,500	41	1,710	12.70
1988	48,200	37	1,803	11.85

Green Peas by County, 1987

County	Acreage Harvested	Yield Per Acre	Production
	Acres	Cwt.	Cwt.
Columbia	1,000	25.0	25,000
Grant	900	53.3	48,000
Grays Harbor	1,500	40.7	61,000
Lewis	4,300	39.3	169,000
Skagit	14,000	49.9	698,000
Snohomish	3,100	52.3	162,000
Walla Walla	8,300	29.0	241,000
Whatcom	4,000	45.5	182,000
Whitman	4,000	25.3	101,000
Other Co.	400	57.0	22,800
State Total	41,500	41.2	1,709,800

Green Peas by County, 1988

County	Acreage Harvested	Yield Per Acre	Production
	Acres	Cwt.	Cwt.
Columbia	1,000	18.0	18,000
Grant	2,100	59.5	125,000
Grays Harbor	1,800	41.7	75,000
Lewis	3,900	35.9	140,000
Skagit	14,800	49.0	725,000
Snohomish	3,300	53.9	178,000
Walla Walla	12,100	21.7	263,000
Whatcom	3,500	45.7	160,000
Whitman	5,400	18.5	100,000
Other Co.	300	62.5	18,600
State Total	48,200	37.4	1,802,600

DRY ONIONS

Harvested acreage for storage onions increased 11 percent to a record 5,600 acres in 1988. The storage onion yield was 450 cwt. per acre, 10 cwt. less than the previous year. Storage onion production at 2,520,000 cwt. was at a record high for the second consecutive year. The average price received by Washington producers in 1988 was \$9.40 per cwt., 11 percent lower than in 1987. This resulted in a slight decline in the value of production at \$19.9 million, down \$551,000 from the previous year.

Harvested acreage for non-storage onions was up from 1987 by 200 acres. The non-storage onion yield was 400 cwt. per acre, an increase of 20 cwt. from the previous year. Production increased by 60 percent from 532,000 cwt. in 1987 to 640,000 cwt. for 1988. The average price received by onion growers decreased to \$10.70 per cwt., 20 percent less than 1987. The combination of higher acreage and lower price results in the value of production for non-storage onions to be \$6.8 million, virtually unchanged from the previous year.

Acreage, Production, and Value

Year	Acreage Harvested	Yield Per Acre	Production	Average Price Per Cwt.
	Acres	Cwt.	1,000 Cwt.	Dollars
1979	4,650	395	1,838	6.50
1980	4,080	387	1,577	11.14
1981	4,500	400	1,800	14.85
1982	4,750	378	1,797	5.98
1983	4,700	432	2,032	12.45
1984	5,500	430	2,367	10.04
1985	5,600	384	2,153	6.29
1986	5,700	399	2,277	10.44
1987	6,400	443	2,832	9.65
1988	7,200	439	3,160	8.47

1/ Includes shrinkage and loss.

Dry Onions by County, 1987

County	Acreage Harvested	Yield Per Acre	Production
	Acres	Cwt.	Cwt.
Adams	1,200	430	516,000
Benton	500	430	215,000
Franklin	400	410	164,000
Grant	1,900	490	931,000
Walla Walla	1,600	420	672,000
Yakima	600	410	246,000
Other Co.	200	440	88,000
State Total	6,400	443	2,832,000

Dry Onions by County, 1988

County	Acreage Harvested	Yield Per Acre	Production
	Acres	Cwt.	Cwt.
Adams	1,300	440	572,000
Benton	500	430	215,000
Franklin	300	440	132,000
Grant	2,400	475	1,140,000
Walla Walla	1,900	405	770,000
Yakima	500	430	215,000
Other Co.	300	386	116,000
State Total	7,200	439	3,160,000

LETTUCE

Harvested acreage for lettuce was up from 1987 by 200 acres. The yield was 240 cwt. per acre, up 12 percent from the previous year. Total lettuce production increased to a record level of 336,000 cwt. in 1988 an increase of 40 percent from the 240,000 cwt. produced last year. The average price in 1988, at \$15.30 per cwt. is at a record high for the third consecutive year and the total value is at a record high \$5.1 million.

Acreage, Production, and Value

Year	Acreage Harvested	Yield Per Acre	Production	Average Price Per Cwt.
	Acres	Cwt.	1,000 Cwt.	Dollars
1979	1,200	170	204	11.70
1980	1,200	200	240	12.80
1981	1,200	195	234	13.30
1982	1,200	180	216	11.10
1983	1,000	220	220	14.00
1984	1,100	210	231	14.60
1985	1,100	190	209	13.00
1986	1,200	180	216	14.70
1987	1,200	200	240	14.90
1988	1,400	240	336	15.30

Lettuce by County, 1987

County	Harvested Acreage	Yield Per Acre	Production
	Acres	Cwt.	Cwt.
Clark	150	180	27,000
King	150	160	24,000
Pierce	600	230	138,000
Spokane	100	190	19,000
Other Co.	200	160	32,000
State Total	1,200	200	240,000

Lettuce by County, 1988

County	Harvested Acreage	Yield Per Acre	Production
	Acres	Cwt.	Cwt.
Clark	150	200	30,000
King	250	240	60,000
Pierce	850	259	220,000
Spokane	50	200	10,000
Other Co.	100	160	16,000
State Total	1,400	240	336,000

MUSHROOMS

Mushroom production in Washington for 1988 decreased for the first time in nine years. One of the major producers in the State went out of business in 1988 which caused a decline in total production. Fillings and total production in 1988 declined 3 percent from the previous year to 1.66 million square feet and 7.254 million pounds, respectively. The average price in Washington remained unchanged from 1987 at \$1.01 per pound. The total value of production declined to \$7.3 million.

Acreage, Production, Price, and Value

Year	Total Fillings	Production	Price Per Pound	Value Of Production
	1,000 Square Feet	1,000 Lbs.	Dollars	\$1,000
1978-79	1,571	3,326	.969	3,223
1979-80	1,740	3,380	1.090	3,671
1980-81	1,446	4,038	1.170	4,713
1981-82	1,108	4,705	1.210	5,688
1982-83	1,195	4,799	1.140	5,474
1983-84	1,196	4,891	1.060	5,186
1984-85	1,640	5,417	.965	5,229
1985-86	1,844	6,485	.966	6,263
1986-87	1,916	7,501	1.010	7,576
1987-88	1,660	7,254	1.010	7,327

BERRIES

Berries: Acreage, Production, Price, and Value

Crop and Year	Acreage Harvested	Yield Per Acre	Utilized Production	Average Price Per Lb.	Value of Utilized Production	Fresh Market		Processing	
						Production	Average Price Per Lb.	Production	Average Price Per Lb.
	Acres	Lbs.	1,000 Lbs.	Cents	1,000 Dol.	1,000 Lbs.	Cents	1,000 Lbs.	Cents
Cultivated Blackberries									
1984	160	5,000	800	44.5	356	200	58.0	600	40.0
1985	150	4,700	705	53.2	375	315	62.0	390	46.0
1986	150	3,800	570	51.1	292	170	75.0	400	41.0
1987	150	5,400	810	40.1	325	260	62.0	550	29.8
1988	150	5,500	825	48.7	402	325	74.5	500	32.0
Blueberries									
1984	800	6,000	4,800	49.8	2,390	1,700	64.0	3,100	42.0
1985	800	6,875	5,500	62.9	3,462	2,100	79.7	3,400	52.6
1986	800	3,625	2,900	69.7	2,022	1,100	81.5	1,800	62.5
1987	900	7,000	6,300	68.4	4,312	2,400	81.5	3,900	60.4
1988	1,000	6,500	6,500	75.9	4,932	1,800	83.4	4,700	73.0
Cranberries 1/									
1984	1,100	9,360	10,300	47.0	4,841	980	-	9,070	-
1985	1,200	12,330	14,800	46.8	6,926	4,070	-	10,630	-
1986	1,200	8,330	10,000	45.3	4,530	4,620	-	5,340	-
1987	1,200	10,830	13,000	45.0	5,850	1,680	-	11,150	-
1988	1,200	11,250	13,500	44.0	5,940	1,920	-	11,480	-
Black Raspberries									
1984	100	850	85	55.3	47	15	59.0	70	55.0
1985	100	950	95	138.9	132	25	135.0	70	140.0
1986	100	700	70	165.7	116	14	170.0	56	165.0
1987	100	1,100	110	50.4	55	23	55.0	87	49.2
1988	80	1,300	104	51.9	54	20	100.0	84	41.0
Red Raspberries									
1984	3,000	5,450	16,350	49.2	8,047	1,150	78.5	15,200	47.0
1985	3,200	5,250	16,800	56.1	9,433	1,000	75.9	15,800	54.9
1986	3,300	4,200	13,860	75.8	10,509	1,040	86.0	12,820	75.0
1987	3,600	6,400	23,040	52.6	12,109	1,300	93.6	21,740	50.1
1988	4,000	6,300	25,200	53.5	13,482	1,200	83.5	24,000	52.0
Strawberries									
1984	3,000	7,000	21,000	25.8	5,424	2,200	50.0	18,800	23.0
1985	3,000	7,100	21,300	32.7	6,971	2,300	47.0	19,000	31.0
1986	2,800	5,000	14,000	46.4	6,500	2,000	55.0	12,000	45.0
1987 2/	2,500	9,600	24,000	34.1	8,180	2,500	52.0	21,500	32.0
1988	2,400	9,200	22,100	30.9	6,838	2,500	54.0	19,600	28.0
Other Berries									
1984	30	-	50	-	20	-	-	-	-
1985	90	-	180	-	70	-	-	-	-
1986	110	-	180	-	108	-	-	-	-
1987	160	-	770	-	275	-	-	-	-
1988	180	-	1,050	-	490	-	-	-	-
State Total 3/									
1984	8,190	-	53,385	-	21,125	-	-	-	-
1985	8,540	-	59,380	-	27,369	-	-	-	-
1986	8,460	-	41,580	-	24,077	-	-	-	-
1987	8,610	-	68,030	-	31,106	-	-	-	-
1988	9,010	-	69,279	-	32,138	-	-	-	-

1/ Utilized Production includes berries lost because of dehydration and berry breakdown after delivery: 1984=250,000 lbs.; 1985=100,000 lbs.; 1986=40,000 lbs.; 1987=170,000 lbs.; 1988=100,000 lbs.

2/ Excludes 50,000 cwt. not harvested because of market conditions.

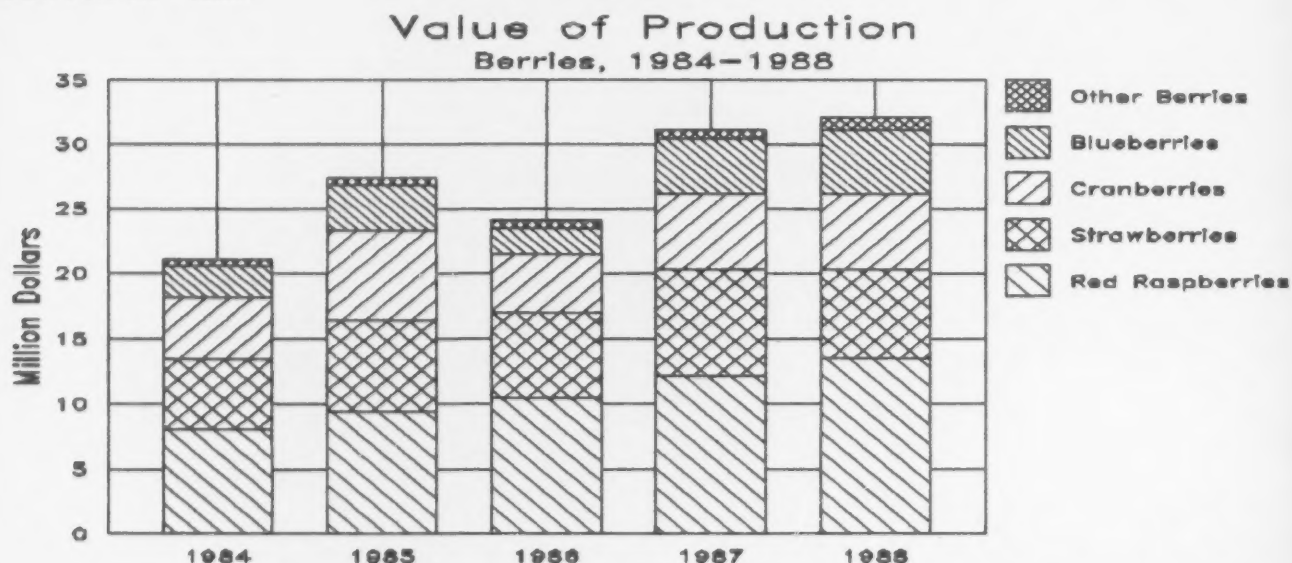
3/ The State Total for the value of production includes the value for miscellaneous berries.

- Not Available.

BERRIES

Washington berry production was quite good during 1988 as berry plants came through the mild winter in excellent condition. Early season drought plus cool spring temperatures did cause some concern among berry producers. However, favorable temperatures and precipitation did prevail, and excellent berry crops were harvested. Production was higher than a year ago for all berries except for strawberries and black raspberries. Harvested acreage also declined for these two berry crops, whereas other berry acreages remained steady or increased.

Berry crops added a record \$32.3 million to the State's agricultural economy. Producers received higher prices for all berries except for strawberries, which were off 3.2 cents per pound from the 1987 crop, and cranberries, which were off 1 cent.



BLACK RASPBERRIES

Black raspberry acreage in 1988 dropped to 80 acres, down 20 acres from 1987. The 1988 average yield, at 1,300 pounds, was the highest since 1980, and increased 18 percent from last year. However, utilized production of 104,000 pounds was 5 percent lower than 1987. The average price received by growers increased 1.5 cents from 1987 to 51.9 cents per pounds.

Acreage, Production, and Price

Year	Acreage Harvested	Yield Per Acre	Utilized Production	Average Price Per Lb.
	Acres	Lbs.	1,000 Lbs.	Cents
1979	130	2,200	286	86.7
1980	120	1,460	175	41.0
1981	120	670	80	26.1
1982	110	1,230	135	29.6
1983	110	1,000	110	51.4
1984	100	850	85	55.3
1985	100	950	95	138.9
1986	100	700	70	165.7
1987	100	1,100	110	50.4
1988	80	1,300	104	51.9

STRAWBERRIES

Winter damage to strawberry plants was minimal, but early in the season growers were concerned about the dry cool spring weather. However, favorable temperatures and precipitation did prevail and early blossoms were excellent.

Harvest started in early June with good quality. Rains at times did hamper harvest, but excellent berries were picked as yields averaged 9,200 pounds per acre, the second highest state average yield on record. This was only 400 pounds below the record high yield of 9,600 pounds per acre in 1987.

Acreage for harvest has steadily declined since 1983. At 2,400 acres, harvested acreage was at a record low for the State. Strawberry growers are concerned that short labor supply, wage levels, and low prices will affect future strawberry output.

Acreage, Production, and Price

Year	Acreage Harvested	Yield Per Acre	Utilized Production	Average Price Per Lb.
	Acres	Lbs.	1,000 Lbs.	Cents
1979	3,100	5,300	16,400	34.7
1980	2,900	6,000	17,400	34.7
1981	2,800	6,000	16,800	38.3
1982	3,000	6,200	18,600	43.4
1983	3,100	6,200	19,200	40.5
1984	3,000	7,000	21,000	25.8
1985	3,000	7,100	21,300	32.7
1986	2,800	5,000	14,000	46.4
1987	2,500	9,600	24,000	34.1
1988	2,400	9,200	22,100	30.9

Strawberries by County, 1987

County	Acreage Harvested	Yield	Production
	Acres	Lbs.	1,000 Lbs.
Clallam	40	5,000	200
Clark	90	9,200	828
Franklin	80	9,000	720
King	210	9,400	1,974
Kitsap	50	6,200	310
Lewis	70	5,600	392
Pierce	280	9,200	2,576
Skagit	700	10,900	7,630
Snohomish	220	8,800	1,936
Spokane	60	6,600	396
Thurston	50	8,000	400
Whatcom	600	10,400	6,240
Other Counties	50	7,960	398
State Total	2,500	9,600	24,000

Strawberries by County, 1988

County	Acreage Harvested	Yield	Production
	Acres	Lbs.	1,000 Lbs.
Clallam	40	6,550	262
Clark	70	9,100	637
Franklin	100	8,000	800
King	180	9,000	1,620
Kitsap	30	5,500	165
Lewis	50	5,600	280
Pierce	280	7,000	1,960
Skagit	700	10,700	7,490
Snohomish	200	8,600	1,720
Spokane	50	6,000	300
Thurston	50	10,000	500
Whatcom	600	10,100	6,060
Other Counties	50	6,120	306
State Total	2,400	9,200	22,100

RED RASPBERRIES

Red raspberry production in Washington was at a record high of 25.2 million pounds, 9 percent more than a year ago. The record output was a combination of more acres being harvested with good yields. Growers harvested 4,000 acres during 1988, only 500 acres below the record high of 1949. Favorable weather conditions also contributed to the excellent crop. Only minor incidences of disease and insects were reported by producers.

Raspberries contributed a record \$13.5 million to the agricultural economy of Washington.

Acreage, Production, and Price

Year	Acreage Harvested	Yield Per Acre	Utilized Production	Average Price Per Lb.
	Acres	Lbs.	1,000 Lbs.	Cents
1979	2,600	4,900	12,740	69.5
1980	2,800	4,500	12,600	37.3
1981	3,000	4,750	14,250	52.0
1982	3,100	5,700	17,670	67.3
1983	3,000	5,800	17,400	43.0
1984	3,000	5,450	16,350	49.2
1985	3,200	5,250	16,800	56.1
1986	3,300	4,200	13,860	75.8
1987	3,600	6,400	23,040	52.6
1988	4,000	6,300	25,200	53.5

Red Raspberries by County, 1987

County	Acreage Harvested	Yield	Production
	Acres	Lbs.	1,000 Lbs.
Clallam	80	5,000	400
Clark	420	6,190	2,600
Cowlitz	100	6,000	600
King	70	5,860	410
Kitsap	40	4,500	180
Lewis	40	4,250	170
Pierce	400	6,300	2,520
Skagit	450	6,400	2,878
Snohomish	120	5,000	600
Spokane	50	4,000	200
Whatcom	1,780	6,900	12,282
Yakima	30	4,330	130
Other Counties	20	3,500	70
State Total	3,600	6,400	23,040

Red Raspberries by County, 1988

County	Acreage Harvested	Yield	Production
	Acres	Lbs.	1,000 Lbs.
Clallam	80	5,500	440
Clark	400	6,100	2,440
Cowlitz	100	5,000	500
King	70	5,000	350
Kitsap	40	5,100	204
Lewis	40	4,400	176
Pierce	400	6,030	2,412
Skagit	500	6,590	3,295
Snohomish	180	5,450	981
Spokane	40	4,200	168
Whatcom	2,100	6,670	14,007
Yakima	30	5,000	150
Other Counties	20	3,850	77
State Total	4,000	6,000	25,200

BLUEBERRIES

Washington blueberry producers had a record year during 1988 as they harvested 1,000 acres and received a top price of 75.9 cents per pound. Yields might have been at a bumper level, too, if several days of hot weather with east winds had not lowered yield potential for blueberries. Also, some minor loss was caused by the dry summer conditions plus a shortage of pickers, but overall, a good quality crop was harvested.

Blueberries added a record \$4.9 million to the State's agricultural sector, as compared to \$152,000 during 1952 when blueberries were first included in the statistical program.

Acreage, Production, and Price

Year	Acreage Harvested	Yield Per Acre	Utilized Production	Average Price Per Lb.
	Acres	Lbs.	1,000 Lbs.	Cents
1979	800	5,990	4,792	54.8
1980	800	6,380	5,100	54.7
1981	800	5,750	4,600	60.5
1982	900	6,800	6,120	70.0
1983	900	8,000	7,200	64.4
1984	800	6,000	4,800	49.8
1985	800	6,875	5,500	62.9
1986	800	3,625	2,900	69.7
1987	900	7,000	6,300	68.4
1988	1,000	6,500	6,500	75.9

Blueberries by County, 1987

County	Acreage Harvested	Yield	Production
	Acres	Lbs.	1,000 Lbs.
Clark	100	6,200	620
King	60	5,000	300
Lewis	120	6,000	720
Pierce	100	5,800	580
Skagit	30	5,500	165
Snohomish	40	5,000	200
Thurston	120	7,210	865
Whatcom	300	9,100	2,730
Other Counties	30	4,000	120
State Total	900	7,000	6,300

Blueberries by County, 1988

County	Acreage Harvested	Yield	Production
	Acres	Lbs.	1,000 Lbs.
Clark	120	5,000	600
King	50	3,000	150
Lewis	120	4,500	540
Pierce	100	5,700	570
Skagit	30	3,670	110
Snohomish	40	7,000	280
Thurston	120	7,330	880
Whatcom	390	8,330	3,250
Other Counties	30	4,000	120
State Total	1,000	6,500	6,500

CRANBERRIES

Cranberry fruit development was two weeks behind normal early in the season. However, late season weather was quite favorable for yield development and a 10 year trend for light yields on even numbered years was broken. Cranberry bogs yielded 112.5 barrels per acre in 1988, compared with 108.3 barrels in 1987.

Acreage for harvest has remained steady at 1,200 acres since 1985, and during the 1973-84 period 1,100 acres were harvested. Since 1973, yields have ranged from 84 to 134 barrels and averaged 108 barrels per acre. During the 1966-72 years, yields have ranged from 105 to 162 barrels and averaged 140 barrels per acre.

Acreage, Production, and Price

Year	Acreage Harvested	Yield Per Acre	Utilized Production	Average Price Per Lb.
	Acres	Lbs.	1,000 Lbs.	Cents
1979	1,100	13,360	14,700	26.7
1980	1,100	9,450	10,400	33.1
1981	1,100	11,730	12,900	41.7
1982	1,100	8,360	9,200	39.8
1983	1,100	11,360	12,500	44.3
1984	1,100	9,360	10,300	47.0
1985	1,200	12,330	14,800	47.8
1986	1,200	8,330	10,000	45.3
1987	1,200	10,830	13,000	45.0
1988	1,200	11,250	13,500	44.0

CULTIVATED BLACKBERRIES

Blackberry acreage for harvest has remained unchanged since 1985, at 150 acres. However, the 1988 yield, at 5,500 pounds per acre, is at the highest level since 1977 when 5,900 pounds were obtained per acre. The 1988 production, at 825,000 pounds, is 2 percent above last year's output. Growers received an average of 48.7 cents per pound, an increase of 8.6 cents per pound from 1987.

Acreage, Production, and Price

Year	Acreage Harvested	Yield Per Acre	Utilized Production	Average Price Per Lb.
	Acres	Lbs.	1,000 Lbs.	Cents
1979	200	2,540	508	55.2
1980	240	3,500	840	15.8
1981	220	3,750	825	22.5
1982	160	3,800	608	27.8
1983	160	4,250	680	30.0
1984	160	5,000	800	44.5
1985	150	4,700	705	53.2
1986	150	3,800	570	51.1
1987	150	5,400	810	40.1
1988	150	5,500	825	48.7

Livestock and Poultry

General Information

Washington's 1989 centennial was celebrated with the reinactment of early transportation by wagontrain. Four separate wagon trains moved across the State ending in Olympia, June 17, 1989.

History reminds us that the early pioneers brought horses, cattle, hogs, sheep and poultry into Washington by wagontrain. Through time, the livestock industry has undergone profound changes due to management practices, genetics, and feed improvements.

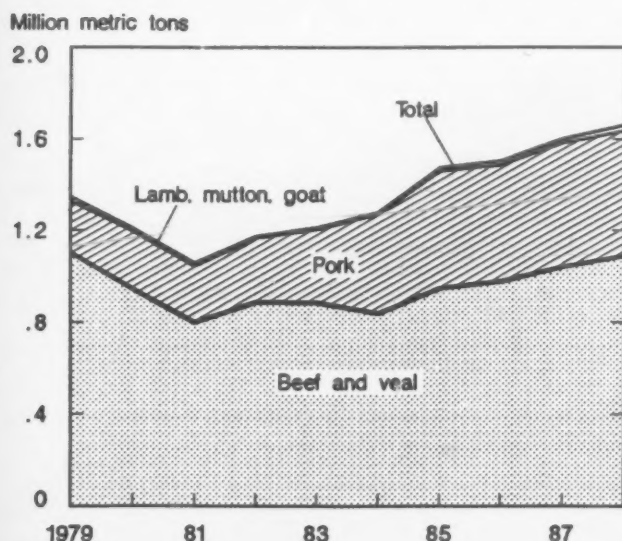
The value of production in 1988 for all livestock and products reached a new record of more than \$1 billion. This tops the previous record set in 1984 at \$939.5 million.

The Washington Agricultural Statistics Service has made many adjustments in survey techniques and estimating procedures to keep abreast of changes in agriculture and to satisfy increased data needs, especially in the livestock industry. For years, surveys consisted of questionnaires mailed to informed livestock and poultry producers, asking about livestock inventories, marketings, death losses and egg production. Today, scientific probability surveys are used to select a sample of producers to be asked specific questions about livestock and poultry on their farms and ranches.

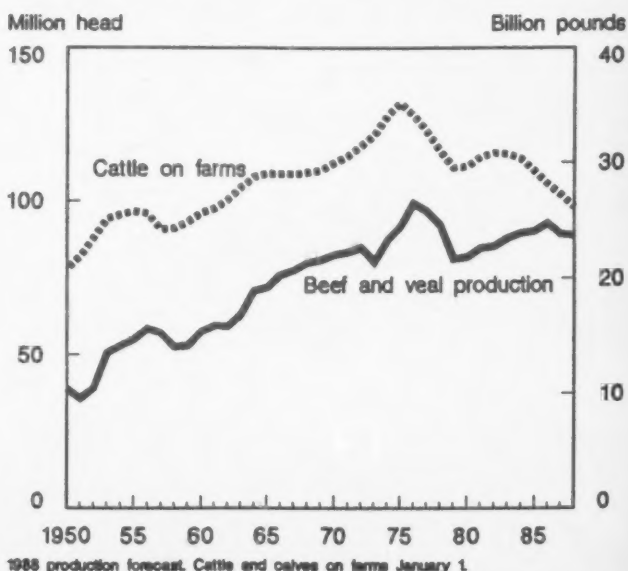
Basic requirements for livestock and poultry probability surveys are a suitable sampling frame, which includes all producers and a method of selecting a sample from this frame with known probabilities. Probability sample surveys and estimating procedures have the property of being unbiased and can provide measures of precision and reliability to the resulting survey estimate. Many questionnaires are still mailed, but, farm operators not responding by mail are phoned or personally interviewed, so that the total sample selected is represented.

Beef producers are being recognized in this year's bulletin with the cover photo and the following section on "125 Years of Cattle Counts."

U.S. Imports of red meat



Cattle numbers and beef production



Value of Production, Washington

Commodity	1984	1985	1986	1987	1988
	\$1,000				
All Cattle	339,578	287,784	294,337	325,594	401,461
Milk	466,845	478,471	468,980	474,991	495,851
All Hogs and Pigs	8,992	7,223	7,227	9,268	8,717
All Sheep and Lambs	2,183	3,200	3,376	3,376	3,715
Wool	407	279	320	482	665
Chickens, Broilers	35,805	32,890	35,015	34,951	40,862
Chickens, Layers	1,071	1,170	1,034	1,094	799
Eggs	67,803	55,103	55,577	48,211	55,402
Mink	6,928	7,910	8,085	11,325	9,219
Honey	N/A	N/A	1,728	1,815	1,344
Minor Livestock and Poultry	9,911	11,121	10,635	12,784	11,810
Total	939,523	885,151	886,314	923,891	1,029,845

Inventory and Value, January 1

Species and Year	Washington			United States		
	Inventory	Value		Inventory	Value	
		Per Head	Total		Per Head	Total
	1,000	1,000 Dollars	Dollars	1,000	1,000 Dollars	Dollars
All Cattle and Calves						
1985	1,470	475.00	698,250	109,749	402.00	44,138,618
1986	1,460	440.00	642,400	105,468	391.00	41,279,749
1987	1,300	485.00	630,500	102,000	407.00	41,482,765
1988	1,290	610.00	786,900	99,524	523.00	52,045,643
1989	1,300	665.00	864,500	99,484	607.00	60,394,509
All Hogs and Pigs 1/						
1985	45	75.50	3,398	54,043	75.00	4,055,724
1986	51	77.00	3,927	52,313	69.60	3,640,368
1987	50	111.00	5,550	50,920	91.90	4,679,398
1988	55	84.00	4,620	54,620	76.10	4,158,300
1989	53	69.00	3,657	55,299	66.30	3,665,069
All Sheep and Lambs						
1985	53	62.00	3,286	10,443	61.10	637,873
1986	58	68.00	3,944	9,983	67.40	673,048
1987	59	75.50	4,455	10,334	75.70	782,108
1988	72	78.50	5,652	10,784	90.00	970,484
1989	74	76.50	5,661	10,802	82.40	889,765
All Chickens 1/ 2/						
1985	6,130	1.45	8,889	374,008	2.02	754,312
1986	6,624	1.85	12,254	368,548	1.90	700,150
1987	5,700	1.60	9,120	369,131	1.87	690,818
1988	6,005	1.60	9,608	377,727	1.87	706,131
1989	6,085	1.65	10,040	355,489	2.04	725,016
Total Value -- All Species 2/						
1985			713,823			49,586,527
1986			662,525			46,293,315
1987			649,625			47,635,089
1988			806,780			57,579,224
1989			883,858			65,674,359

1/ December 1 of previous year.

2/ Excludes broilers.

CATTLE AND CALVES

125 Years of Cattle Counts

The earliest cattle inventory count in Washington and the Nation was made in 1867. Washington was set at 81,000 head. This count included oxen, "milche" cows and all other cattle.

During the early 1800's the open rangeland of eastern Washington was particularly inviting for cattle production. By the mid- 1860's, the better range areas of the Walla Walla area were well stocked. The cattle grazed year round on the natural prairie hays comprised of wheat grass, June grass and bunch grass. Herds were relatively small and numbered about 2,000. The cattle were a motley group. Purebred herds were unknown in this time. In 1865, 200,000 head of cattle grazed the Walla Walla Valley.

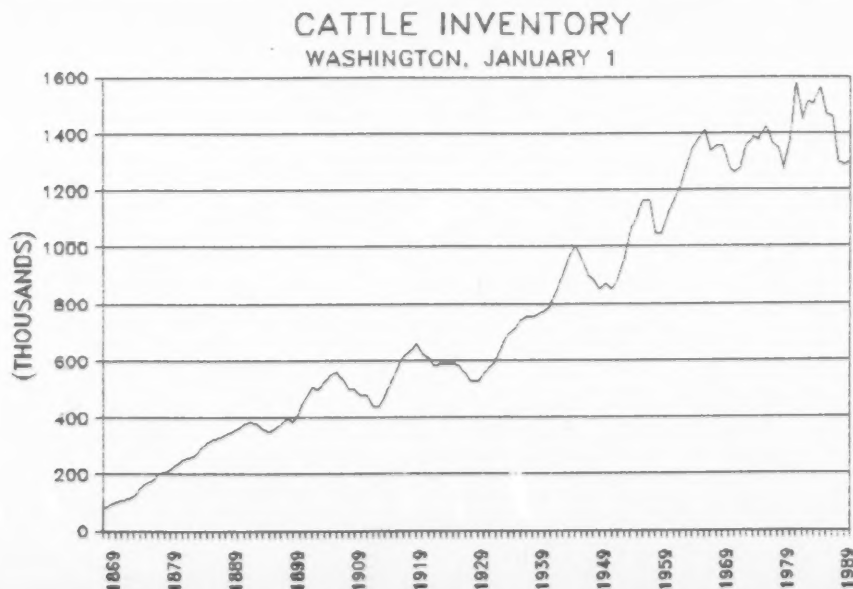
In the late 1800's, wheat production on the open ranges of the Palouse squeezed out the range livestock industry in this area of Washington.

During the boom period of World War I, the 1920 Agricultural Census showed the cattle inventory up 42% over the 1910 Census.

Cattle numbers increased only 9 percent during the decade of the 1920's. Although 625,000 head were divided between the western and eastern counties, dairy cows and heifers made up 50% of the western herds, but 29 percent of the eastern counties inventory. Cattle numbers declined to 123,000 head in the beef producing region centered on the Yakima-Kittitas Valley.

The decade 1940-1950 marked the beginning of trends in the cattle population of Washington which have continued into the 1980's.

Cattle inventory numbers in Washington show a definite pattern. Nine very pronounced cattle cycles occurred between 1867 and 1988. Each of the cycles has peaked at a level higher than the previous cycles, except for the last peak in 1984. The all time high annual inventory number of 1,579,000 head was recorded on January 1, 1980. The cattle cycle occurs because of the biological time lag in the production process, coupled with the production decisions of producers in reaction to economic forces. In addition, the impact of weather, forage supplies, competing meats and consumer preference can lead to sharp adjustments in inventories. During the 1980's, many factors in combination with each other have contributed to shorter cycles.



Cattle and Calves: Inventory, Calf Crop and Value, 1870-1987

Year	All Cattle & Calves January 1	All Cows & Heifers That Have Calved 1/		Calf Crop	Value	
		Beef Cows January 1	Milk Cows January 1		Average Per Head	Total
		1,000 Head			Dollars	1,000 Dollars
1867	81	-	5	-	20.30	1,645
1891	385	-	60	-	23.50	9,045
1894	350	-	85	-	22.70	7,952
1905	560	-	131	-	19.80	11,093
1911	440	-	175	-	31.10	13,679
1918	663	-	251	-	48.90	32,402
1927	530	47	265	261	50.00	26,500
1944	1,002	146	380	431	63.70	63,827
1948	851	148	306	377	130.00	110,630
1955	1,160	271	289	498	100.00	116,000
1957	1,044	247	280	458	95.00	99,180
1965	1,412	389	223	532	118.00	166,616
1970	1,260	365	175	513	190.00	239,400
1971	1,285	361	177	527	200.00	257,000
1972	1,362	383	182	537	220.00	299,640
1973	1,389	391	185	547	270.00	375,030
1974	1,380	406	406	536	310.00	427,800
1975	1,420	403	181	527	180.00	255,600
1976	1,375	393	179	500	215.00	295,625
1977	1,350	355	181	460	230.00	310,500
1978	1,275	355	185	491	260.00	331,500
1979	1,375	372	198	510	445.00	611,875
1980	1,579	379	199	520	560.00	884,240
1981	1,450	373	200	530	550.00	797,500
1982	1,510	398	207	550	470.00	709,700
1983	1,505	417	213	560	470.00	707,350
1984	1,560	436	214	550	465.00	725,400
1985	1,470	398	211	550	475.00	698,250
1986	1,460	407	223	540	440.00	642,400
1987	1,300	399	201	525	485.00	678,900
1988	1,290	359	211	530	610.00	786,900
1989	1,300	359	216		665.00	864,500

1/ Prior to January 1, 1974 this category was defined as cows and heifers 2 years old and older.

Inventory on Farms by Class, January 1

Class	1985	1986	1987	1988	1989
1,000 Head					
Cows and Heifers that have Calved:					
Beef Cows	398	407	399	359	359
Milk Cows	211	223	201	211	216
Total	609	630	600	570	575
Heifers, 500 pounds and over:					
For Beef Cow Replacement	88	73	75	72	83
For Milk Cow Replacement	132	115	80	80	104
Other Heifers	102	112	103	133	105
Total	322	300	258	285	292
Steers, 500 pounds and over	249	236	209	233	233
Bulls, 500 pounds and over	27	28	23	22	25
Calves, less than 500 pounds	263	266	210	180	175
All Cattle and Calves	1,470	1,460	1,300	1,290	1,300
Number of Cattle Operations 1/	23,000	23,000	22,000	23,000	2/

1/ Any place having one or more head on hand at any time during the year.

2/ Available February 1990.

Balance Sheet

Year	Inventory January 1	Calf Crop	Inship- ments	Marketings 1/		Farm Slaughter 2/	Deaths		Inventory Following January 1
				Cattle	Calves		Cattle	Calves	
	1,000 Head								
1984	1,560	550	200	595	130	38	30	47	1,470
1985	1,470	550	173	511	99	38	30	55	1,460
1986	1,460	540	167	635	117	37	28	50	1,300
1987	1,300	525	213	545	100	33	25	45	1,290
1988	1,290	530	310	657	80	21	27	45	1,300

1/ Excludes interfarm sales within the State.

2/ Excludes custom slaughter for farmers at commercial establishments.

Production and Income

Year	Pro- duction 1/	Market- ings 2/	Average Price Per Cwt.		Value of			
			Cattle	Calves	Pro- duction	Cash Receipts	Home Con- sumption	Gross Income
	1,000 Pounds		Dollars		1,000 Dollars			
1984	552,300	708,470	61.70	55.10	339,578	435,131	25,953	461,084
1985	524,720	607,670	54.90	53.70	287,784	333,374	25,740	359,114
1986	553,260	737,980	53.20	52.90	294,337	392,552	24,437	416,989
1987	532,580	633,250	61.00	76.00	325,594	388,458	24,700	413,158
1988	610,210	781,060	65.30	84.80	401,461	513,113	20,862	533,975

1/ Adjustments made for changes in inventory and for inshipments.

2/ Excludes custom slaughter for use on farms where produced and interfarm sales within the State.

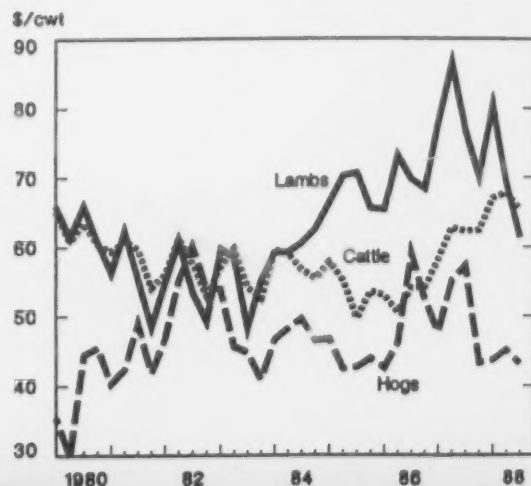
Cattle: Commercial Slaughter

Year and Month	Washington			United States		
	Head	Liveweight		Head	Liveweight	
		Per Head	Total		Per Head	Total
	1,000	Pounds	1,000 Pounds	1,000	Pounds	1,000 Pounds
1988 January	79.5	1,183	94,030	2,926.1	1,119	3,274,892
February	71.9	1,174	84,418	2,758.5	1,118	3,085,056
March	77.0	1,182	90,993	2,896.2	1,117	3,234,889
April	68.5	1,162	79,603	2,782.8	1,106	3,076,738
May	73.7	1,153	84,989	2,908.5	1,102	3,204,430
June	80.1	1,154	92,392	3,067.7	1,105	3,389,837
July	73.1	1,172	85,709	2,982.7	1,113	3,318,492
August	83.8	1,178	98,731	3,207.0	1,123	3,601,608
September	79.5	1,204	85,762	3,010.0	1,130	3,402,122
October	77.3	1,192	92,181	2,965.7	1,135	3,367,008
November	73.1	1,207	88,208	2,799.8	1,134	3,174,048
December	73.5	1,180	86,791	2,773.9	1,141	3,164,765
1984.....	991.8	1,149	1,139,337	37,582.7	1,067	40,084,665
1985.....	936.6	1,169	1,095,063	36,292.7	1,098	39,841,063
1986.....	928.2	1,144	1,061,971	37,288.3	1,100	41,031,617
1987.....	849.8	1,153	979,978	35,646.9	1,105	39,386,808
1988.....	911.2	1,178	1,073,808	35,078.9	1,120	39,293,886

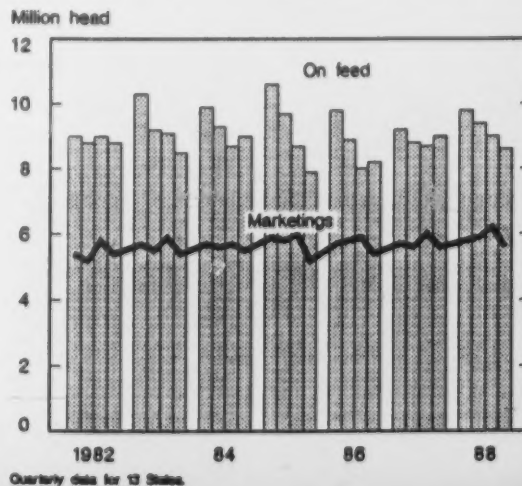
Cattle on Feed, Placements and Marketings

Year/ Quarter	Cattle & Calves on Feed				Previous Quarter		
	Total All	Steers	Heifers	Cows & Others	Placements	Market- ings	Other Disap- pearance
1,000 Head							
1984							
Jan.	183	134	49	0	140	114	5
Apr.	188	133	51	4	126	116	1
Jul.	185	128	54	6	122	124	1
Oct.	221	150	71	0	170	133	2
1985							
Jan.	203	146	57	0	124	140	2
Apr.	156	104	54	0	131	171	5
Jul.	154	98	53	6	111	109	6
Oct.	204	135	69	0	150	98	2
1986							
Jan.	198	125	73	0	115	118	3
Apr.	161	96	65	0	108	143	2
Jul.	144	86	57	1	108	122	3
Oct.	166	102	64	0	99	75	2
1987							
Jan.	138	94	44	0	91	116	3
Apr.	138	87	51	0	98	96	2
Jul.	151	99	52	0	102	87	2
Oct.	197	120	77	0	157	109	2
1988							
Jan.	198	117	80	1	127	124	2
Apr.	172	106	66	0	107	129	4
Jul.	170	107	63	0	110	111	1
Oct.	201	127	73	1	153	120	2
1989							
Jan.	190	127	63	0	120	124	7
Apr.	163	93	70	0	80	102	5
Jul.	156	96	60	0	101	105	3

Livestock prices received by farmers, U.S.



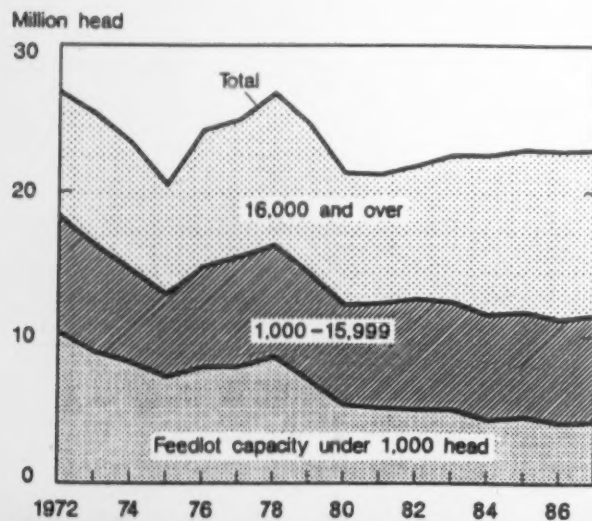
Cattle on feed and marketings



Cattle on Feed by Weight Groups

Year/ Quarter	Steers and Steer Calves					Heifers and Heifer Calves			
	Under 500 Lbs	500- 699 Lbs	700- 899 Lbs	900- 1,099 Lbs	1,100+ Lbs	Under 500 Lbs	500- 699 Lbs	700- 899 Lbs	900+ Lbs
1,000 Head									
1984									
Jan.	0	7	39	49	39	0	4	23	22
Apr.	0	3	46	56	28	0	6	26	19
Jul.	0	1	41	40	46	0	8	21	25
Oct.	0	6	33	62	49	0	3	30	38
1985									
Jan.	0	2	21	74	49	0	2	22	33
Apr.	0	3	33	45	23	0	4	27	23
Jul.	0	5	44	33	16	2	4	25	22
Oct.	0	2	43	66	24	0	2	29	38
1986									
Jan.	0	5	25	59	36	0	6	22	45
Apr.	0	2	25	48	21	0	5	30	30
Jul.	0	3	21	43	19	0	2	20	35
Oct.	0	3	25	45	29	0	10	31	23
1987									
Jan.	0	13	32	37	12	0	7	23	14
Apr.	0	6	37	36	8	0	13	27	11
Jul.	0	3	32	53	11	0	4	30	18
Oct.	0	1	46	54	19	0	12	34	31
1988									
Jan.	0	8	38	56	15	0	7	35	38
Apr.	0	5	39	43	19	0	7	32	27
Jul.	0	4	24	44	35	0	4	23	36
Oct.	0	11	37	55	24	0	11	37	25
1989									
Jan.	0	9	45	57	16	0	6	24	33
Apr.	0	3	30	47	13	0	5	33	32
Jul.	0	3	27	40	26	0	3	26	31

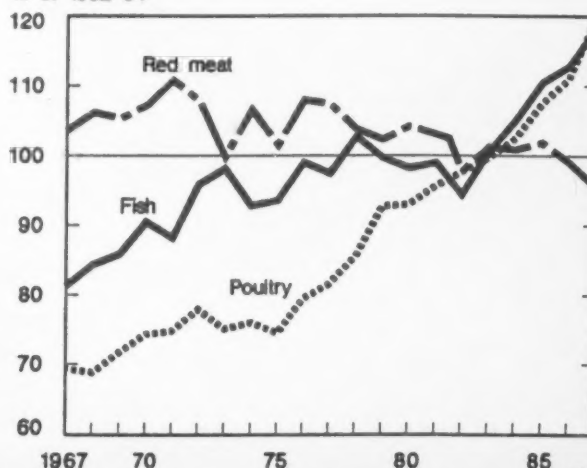
Fed cattle marketed by feedlot capacity



Data are for 13 States.

Per capita consumption of meat, poultry, and fish, U.S.

% of 1982-84



These indexes are based on pounds consumed (retail-weight equivalent) and measure quantity changes only.

DAIRY

General Information

Early development of Washington's dairy industry centered at Ellensburg, in Kittitas County. Today the dairy center is Whatcom County, with approximately one-third of the dairy farms in Washington, according to the milk market administrators report.

The value of milk production moved to second place among the forty principal agricultural commodities produced in Washington during 1988. The value of production, at \$495.9 million, rose 4 percent over the previous year, as a result of increased milk production. The milk price slipped slightly during 1988 from \$12.62 the previous year to \$12.50 per cwt.

Milk Production, Utilization, Marketing, and Value

Production and Use	Unit	1984	1985	1986	1987	1988
Production And Utilization						
Production of milk:						
Total milk produced on farms	Mil. Lbs.	3,468	3,750	3,762	3,763	3,966
Milkfat produced	Mil. Lbs.	127	140	139	139	148
Percentage of milkfat	Percent	3.66	3.73	3.70	3.69	3.72
Utilization:						
Milk Marketed by Producers:						
Sold to plants and dealers						
as whole milk 1/	Mil. Lbs.	3,299	3,582	3,582	3,570	3,766
Sold directly to consumers	Mil. Lbs.	142	149	155	172	176
Milk used where produced						
Fed to calves	Mil. Lbs.	23	16	21	17	20
Used by farm household	Mil. Lbs.	4	3	4	4	4
Marketings						
Milk Marketed by Producers:						
Sold to plants and dealers						
Whole milk sold 1/	Mil. Lbs.	3,299	3,582	3,582	3,570	3,766
Price per Cwt.	Dollars	13.10	12.40	12.10	12.20	12.00
Cash receipts	1,000 Dol.	432,169	444,168	433,422	435,540	451,920
Sold Directly to Consumers						
Quantity	1,000 Qts.	66,047	69,302	72,093	80,000	81,860
Price per quart	Cents	47	46	45	46	50
Cash receipts	1,000 Dol.	31,042	31,879	32,442	36,800	40,930
Total Marketing						
Milk Utilized	Mil. Lbs.	3,441	3,731	3,737	3,742	3,942
Price Per Cwt. of milk	Dollars	13.46	12.76	12.47	12.62	12.50
Price per pound milkfat	Dollars	3.68	3.42	3.37	3.42	3.36
Total cash receipts	1,000 Dol.	463,211	476,047	465,864	472,340	492,850
Farm Use						
Value of milk used						
where produced 2/	1,000 Dol.	3,634	2,424	3,116	2,651	3,001
Total Value of Milk Produced	1,000 Dol.	466,845	478,471	468,980	474,991	495,851
Number of operations with milk cows	Number	3,600	3,400	3,200	3,000	3,000

1/ Includes the equivalent amounts of milk for cream sold to plants and dealers.

2/ Includes value of milk fed to calves and milk used by farm household.

MILK COWS AND MILK PRODUCTION

Milk cows came to Washington with the early settlers pulling in yoke and providing milk to prevent starvation while on the overland immigration. After reaching the homestead sites, the milk cows continued to produce food and cash income from butter sold at trading posts.

The earliest count of "milche" cows was in 1867 when the census recorded 5,000 head. Milk cow numbers peaked in 1943 through 1945 with 380,000 head. Currently, Washington averaged 216,000 milk cows in 1988.

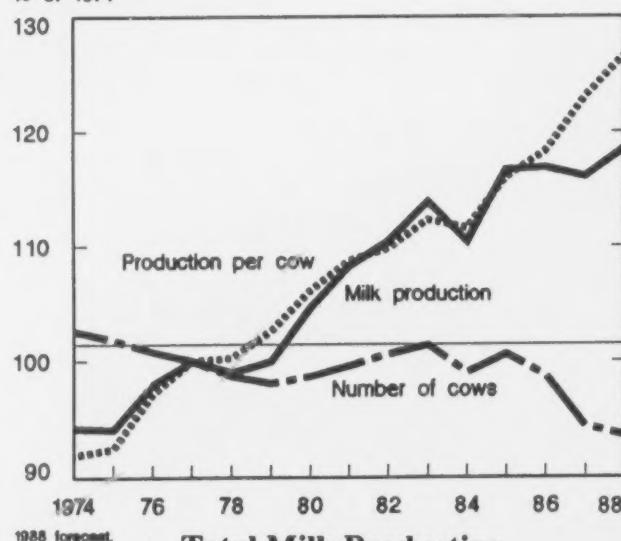
California edged out Washington in leading the nation in milk per cow. Washington had led the nation for the previous five years. Total milk production in Washington increased 5 percent in 1988 to 3,763 million pounds. An estimated 24 million pounds were used on farms where produced. Calves were fed 83 percent of this milk with the remainder consumed in producer households as milk, cream, and butter.

Milk Cows on Farms

Month	1984	1985	1986	1987	1988
1,000 Head					
January	213	211	223	205	213
February	213	213	223	206	216
March	213	216	223	207	217
April	213	219	219	207	216
May	213	222	217	209	217
June	211	225	214	212	216
July	212	228	213	209	215
August	213	229	209	203	216
September	213	227	203	206	217
October	212	225	200	207	215
November	211	224	199	209	216
December	211	223	201	211	216
Average	212	222	212	208	216

Milk production, number of cows, and milk per cow, U.S.

% of 1977



Milk Production per Cow

Month	1984	1985	1986	1987	1988
Pounds					
January	1,330	1,380	1,440	1,485	1,500
February	1,350	1,410	1,485	1,515	1,530
March	1,350	1,410	1,485	1,515	1,530
April	1,350	1,415	1,490	1,515	1,530
May	1,430	1,495	1,550	1,585	1,610
June	1,400	1,435	1,510	1,555	1,560
July	1,450	1,470	1,550	1,575	1,610
August	1,420	1,460	1,530	1,550	1,585
September	1,340	1,390	1,475	1,520	1,525
October	1,360	1,425	1,500	1,515	1,525
November	1,300	1,355	1,440	1,450	1,465
December	1,360	1,405	1,470	1,500	1,530
Annual *	16,358	16,892	17,745	18,091	18,361

Total Milk Production

Month	1984	1985	1986	1987	1988
Million Pounds					
January	283	291	321	304	320
February	266	266	294	279	305
March	288	305	331	314	332
April	288	310	326	314	330
May	305	332	336	331	349
June	295	323	323	330	337
July	307	335	330	329	346
August	302	334	320	315	342
September	285	316	299	313	331
October	288	321	300	314	328
November	274	304	287	303	316
December	287	313	295	317	330
Annual *	3,468	3,750	3,762	3,763	3,966

* Numbers do not add due to rounding.

DAIRY PRODUCTS

There were 26 manufacturing plants producing one or more dairy products in Washington during 1988. These plants employ hundreds of workers and are invaluable to the state's dairy farmers.

Butter was precious to the early pioneer families for home use and as a medium of exchange to buy supplies at trading posts and early stores. Butter production in 1988 was produced in 5 plants, producing 95.1 million pounds. Washington ranked fourth nationally behind Wisconsin, Minnesota and California in butter production. Washington plants also produce American and Italian cheeses, cottage cheese, ice cream, sherbet, dry milk, sour cream, yogurt, and dry whey.

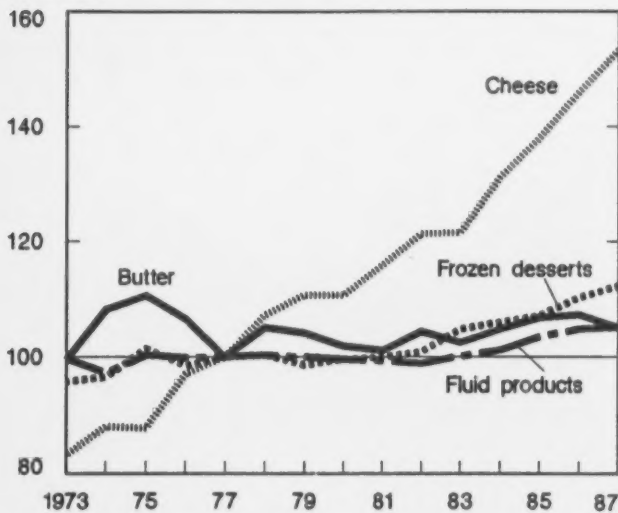
Butter Production

Total Ice Cream

Month	1984	1985	1986	1987	1988	1984	1985	1986	1987	1988
	1,000 Pounds					1,000 Gallons				
January	6,177	6,756	8,503	7,110	7,891	1,085	1,362	1,218	1,270	1,064
February	6,329	6,013	7,361	6,206	8,021	1,147	1,203	1,353	1,343	1,223
March	5,497	6,719	7,866	6,900	8,620	1,469	1,529	1,490	1,592	1,516
April	6,337	7,022	7,837	7,082	8,058	1,479	1,449	1,569	1,653	1,515
May	6,293	7,041	8,395	7,385	8,798	1,627	1,692	1,580	1,759	1,535
June	5,916	7,010	7,173	7,341	8,152	1,753	1,868	1,920	1,824	1,238
July	5,814	6,752	7,387	7,241	7,464	1,842	2,041	1,665	1,870	1,860
August	6,193	7,372	6,445	6,651	7,951	1,658	1,545	1,721	1,948	1,716
September	5,498	7,272	6,302	5,828	7,481	1,382	1,343	1,577	1,501	1,479
October	5,667	7,664	6,674	6,184	7,208	1,399	1,374	1,438	1,308	1,845
November	5,563	7,076	5,367	5,985	7,698	1,336	1,309	1,696	1,316	1,229
December	5,608	7,799	6,757	8,041	7,771	1,323	1,438	1,330	1,268	1,191
Annual	70,892	84,496	86,067	81,954	95,113	17,500	18,153	18,557	18,652	17,411

Dairy product sales, U.S.

% of 1977



Ice Milk Production

Month	1984	1985	1986	1987	1988
	1,000 Gallons				
Jan.	771	587	447	470	506
Feb.	531	478	457	526	523
Mar.	609	591	615	710	763
Apr.	665	682	662	700	750
May	660	822	747	919	902
Jun.	621	787	767	835	1,020
Jul.	783	915	763	1,014	1,146
Aug.	824	830	765	872	1,159
Sep.	646	657	648	862	829
Oct.	551	552	600	820	839
Nov.	576	414	500	620	691
Dec.	567	500	526	671	727
Annual	7,804	7,815	7,497	9,019	9,855

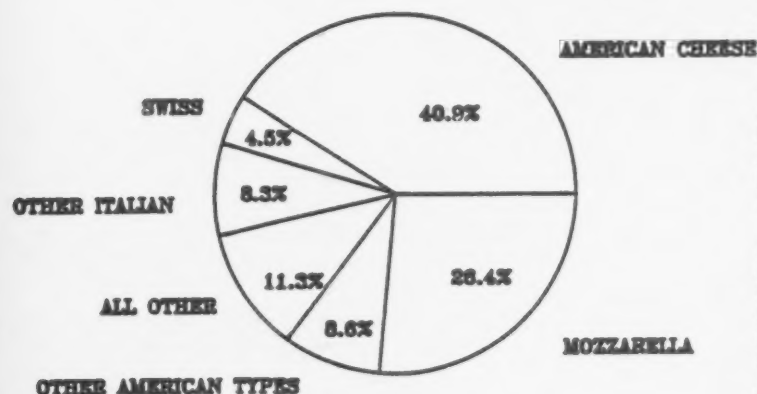
American Cheese Production

Month	1984	1985	1986	1987	1988
1,000 Pounds					
January	3,113	2,615	2,768	2,515	2,164
February	2,829	2,136	2,564	2,157	2,068
March	2,331	2,763	2,102	2,370	2,546
April	2,496	1,540	2,822	2,410	1,951
May	2,962	1,732	2,917	2,467	2,345
June	2,947	1,750	3,130	2,693	2,129
July	3,428	3,569	3,260	2,901	1,833
August	2,417	3,097	3,133	2,525	2,139
September	1,422	2,790	2,732	3,192	2,256
October	1,426	3,089	2,869	3,594	2,338
November	1,216	2,856	2,421	2,689	2,424
December	1,500	2,815	2,847	2,665	2,401
Annual	28,087	30,752	33,565	32,178	26,594

Italian Cheese Production

Month	1984	1985	1986	1987	1988
1,000 Pounds					
January	1,505	1,398	1,756	2,067	2,006
February	1,438	1,506	1,585	1,821	2,167
March	1,722	1,669	1,969	2,256	2,191
April	1,598	1,803	1,878	1,893	2,132
May	1,629	1,827	1,900	1,789	2,188
June	1,667	1,828	1,905	2,290	2,120
July	1,482	1,871	1,931	2,332	2,056
August	1,463	1,832	2,010	2,149	2,098
September	1,509	1,675	1,922	2,334	2,072
October	1,664	1,829	2,129	2,306	2,053
November	1,784	1,605	2,091	2,008	2,098
December	1,657	1,871	2,193	2,051	2,054
Annual	19,118	20,714	23,269	25,296	25,235

Cheese Production 1988, U.S.



Total Cheese Production

Month	1984	1985	1986	1987	1988
1,000 Pounds					
Jan.	4,618	4,046	4,545	4,600	4,253
Feb.	4,267	3,661	4,168	4,026	4,380
Mar.	4,053	4,466	4,087	4,674	4,900
Apr.	4,094	3,358	4,733	4,333	4,219
May	4,591	3,574	4,841	4,271	4,674
Jun.	4,614	3,600	5,049	5,000	4,440
Jul.	4,910	5,505	5,216	5,252	4,042
Aug.	3,880	4,996	5,166	4,709	4,432
Sep.	2,931	4,513	4,704	5,548	4,542
Oct.	3,090	4,943	5,029	5,931	4,520
Nov.	3,000	4,486	4,555	4,738	4,687
Dec.	3,157	4,703	5,082	4,797	4,643
Annual	47,205	51,851	57,175	57,879	53,732

1/ Includes Gouda and Feta cheeses.

Creamed Cottage Cheese Production

Month	1984	1985	1986	1987	1988
1,000 Pounds					
Jan.	1,961	2,114	1,962	2,063	1,855
Feb.	2,101	1,998	1,692	1,931	1,778
Mar.	2,074	2,064	1,841	2,115	1,863
Apr.	2,045	2,118	1,890	2,023	1,787
May	2,255	2,301	2,089	2,085	1,959
Jun.	2,026	2,138	1,889	2,047	2,186
Jul.	2,047	2,187	1,956	2,106	1,741
Aug.	2,184	2,075	1,797	1,897	1,919
Sep.	1,844	1,914	1,983	1,781	1,861
Oct.	2,050	2,115	2,039	1,898	1,734
Nov.	1,986	1,841	1,751	1,719	1,738
Dec.	1,787	1,807	1,750	1,821	2,216
Annual	24,360	24,672	22,639	23,486	22,637

Cottage Cheese Curd Production

Month	1984	1985	1986	1987	1988
1,000 Pounds					
Jan.	1,484	1,762	1,673	1,633	1,561
Feb.	1,578	1,556	1,496	1,601	1,565
Mar.	1,653	1,750	1,668	1,713	1,814
Apr.	1,623	1,695	1,693	1,718	1,508
May	1,673	1,861	1,763	1,764	1,629
Jun.	1,491	1,672	1,666	1,706	1,682
Jul.	1,612	1,731	1,723	1,776	1,548
Aug.	1,725	1,641	1,595	1,643	1,666
Sep.	1,477	1,489	1,503	1,629	1,984
Oct.	1,621	1,710	1,575	1,602	1,859
Nov.	1,578	1,483	1,458	1,474	1,899
Dec.	1,420	1,423	1,419	1,530	1,927
Annual	18,935	19,773	19,332	19,789	20,642

HOGS

The inventory of all hogs and pigs on Washington's 3,400 hog farms totaled 53,000 head on December 1, 1988. This was 4 percent below the 55,000 head December 1, 1987. Breeding hogs made up 13 percent of the current inventory while market hogs destined for slaughter made up the remaining 87 percent.

Washington sows averaged 7.4 pigs per litter through the first half of 1988 and 7.9 pigs per litter during the last half. The total 1988 pig crop totaled 98,000 head, 7,000 more piglets than in 1987.

The 1988 value of production declined to \$8.72 million compared with \$9.27 million the year earlier. The average price received by hog farmers during 1988 for all hogs and pigs was estimated at \$40.30 cwt., \$9.70 per cwt. less than in 1987.

Inventory on Farms by Class, December 1

Class	1984	1985	1986	1987	1988
1,000 Head					
Hogs					
Breeding Hogs	5	6	9	6	7
Market Hogs	40	45	41	49	46
All Hogs	45	51	50	55	53
Number of Hog Operations 1/	3,600	3,300	3,300	3,200	3,400

1/ Any place having one or more head on hand at any time during the year.

Pig Crop

Year	December-May 1/			June-November		
	Sow Farrowed	Pigs Per Litter	Pig Crop	Sows Farrowed	Pigs Per Litter	Pig Crop
	1,000 Head	Head	1,000 Head	1,000 Head	Head	1,000 Head
1984	6.0	8.3	50	4.4	8.3	37
1985	5.0	7.5	38	5.0	8.0	40
1986	4.0	7.7	31	5.0	7.8	39
1987	6.0	7.0	42	6.0	8.2	49
1988	6.8	7.4	50	6.1	7.9	48

1/ December of the preceding year.

Balance Sheet

Year	Beginning Inventory Prev. Yr.	Pigs Saved		Inship- ment	Market- ings 1/	Farm Slaughter 2/	Deaths	Inventory December 1
		Dec.- May	Jun.- Nov.					
	1,000 Head							
1984	53	50	37	0	80	7	8	45
1985	45	38	40	0	56	11	5	51
1986	51	31	39	0	61	4	6	50
1987	50	42	49	0	73	6	7	55
1988	55	50	48	0	89	3	8	53

1/ Excludes interfarm sales within the State.

2/ Excludes custom slaughter for farmers at commercial establishments.

Production and Income

Year	Pro- duction 1/	Market- ings 2/	Average Price Per Cwt.	Value of			
				Pro- duction	Cash Receipts	Home Con- sumption	Gross Income
	1,000 Pounds		Dollars		1,000 Dollars		
1984	18,578	18,514	48.40	8,992	8,961	867	9,828
1985	16,605	12,756	43.50	7,223	5,549	1,224	6,773
1986	15,058	11,265	48.00	7,227	5,407	1,886	7,293
1987	18,536	13,246	50.00	9,268	6,623	2,599	9,222
1988	21,629	19,644	40.30	8,717	7,925	764	8,689

1/ Adjustments made for changes in inventory and for inshipments.

2/ Excludes custom slaughter for use on farms where produced and interfarm sales within the State.

Commercial Slaughter

Year and Month	Washington			United States		
	Head	Liveweight		Head	Liveweight	
		Per Head	Total		Per Head	Total
	1,000	Pounds	1,000 Pounds	1,000	Pounds	1,000 Pounds
1988 January	1.2	231	271	6,980.6	248	1,727,894
February	1.4	232	322	6,686.9	247	1,649,816
March	1.4	230	314	7,692.2	247	1,897,834
April	1.2	277	340	7,091.2	249	1,762,984
May	1.6	235	366	6,884.0	250	1,720,539
June	1.6	237	380	6,902.2	250	1,723,567
July	1.3	230	297	6,366.0	249	1,583,024
August	2.0	233	456	7,292.4	246	1,795,350
September	1.7	229	387	7,719.4	247	1,908,043
October	1.6	230	360	8,096.2	250	2,025,176
November	1.9	231	443	8,138.0	252	2,053,530
December	1.5	231	345	7,945.5	251	1,990,610
1984.....	95.7	234	22,336	85,168.1	243	20,727,868
1985.....	39.3	235	9,247	84,491.9	245	20,666,685
1986.....	29.5	240	7,088	79,598.2	246	19,564,663
1987.....	19.2	231	4,429	81,080.8	247	20,060,447
1988.....	18.2	235	4,281	87,794.6	249	21,838,367

SHEEPS AND LAMBS

Sheep and lamb production has long been an important segment of our agriculture economy. Since colonial times, production of sheep and lamb for meat and wool has substantially contributed to our food and fiber industry. Prior to the early 1900's, production of wool was of primary importance and the production of slaughter animals was incidental. Sheep numbers in Washington peaked in 1935 at 764,000 head. Inventory numbers dropped in the post World War II years of the late 1940's, declining to an all time low of 53,000 head in 1985.

The current estimate on January 1, 1989 increased to 74,000 head, up 2,000 head from a year earlier. Value of production increased to \$3.72 million, up 10 percent from the \$3.38 million in 1987. A decline in sheep and lamb prices was offset by the increased production.

Number on Farms by Class, January 1

Class	1985	1986	1987	1988	1989
	1,000 Head				
Sheep and Lambs					
Ewe Lambs	7.0	9.0	9.5	12.0	14.0
Wether and Ram Lambs	3.0	3.0	3.5	4.0	5.0
Ewes, 1 year plus	41.0	44.0	44.0	54.0	51.0
Rams and Wethers, 1 year plus	2.0	2.0	2.0	2.0	4.0
All Sheep and Lambs	53.0	58.0	59.0	72.0	74.0
Number of Sheep Operations 1/	2,200	2,200	2,200	2,200	2/

1/ Any place having one or more head on hand at any time during the year.

2/ Available February, 1990.

Balance Sheet

Year	Inventory January 1	Lamb Crop	Inship- ments	Marketings 1/		Farm Slaughter 2/	Deaths		Inventory Following January 1
				Sheep	Lambs		Sheep	Lambs	
	1,000 Head								
1984	62	50	2	15	36	3	3	4	53
1985	53	55	2	3	39	3	3	4	58
1986	58	58	7	7	45	4	4	4	59
1987	59	58	10	4	40	1	4	6	72
1988	72	65	8	6	55	1	3	6	74

1/ Excludes interfarm sales within the State.

2/ Excludes custom slaughter for farmers at commercial establishments.

Production and Income

Year	Pro- duction 1/	Market- ings 2/	Average Price Per Cwt.		Value of			
			Sheep	Lambs	Pro- duction	Cash Receipts	Home Con- sumption	Gross Income
	1,000 Pounds		Dollars		1,000 Dollars			
1984	4,670	5,672	12.90	56.40	2,183	2,455	178	2,633
1985	5,515	4,571	15.20	66.70	3,200	2,893	232	3,125
1986	5,871	5,713	14.90	65.60	3,376	3,371	396	3,767
1987	5,903	4,895	24.00	74.40	3,376	3,408	111	3,519
1988	6,399	6,772	20.20	62.20	3,715	3,920	114	4,034

1/ Adjustments made for changes in inventory and for inshipments.

2/ Excludes custom slaughter for use on farms where produced and interfarm sales within the State.

COMMERCIAL SLAUGHTER

Year and Month	Washington			United States		
	Head	Liveweight		Head	Liveweight	
		Per Head	Total		Per Head	Total
	1,000	Pounds	1,000 Pounds	1,000	Pounds	1,000 Pounds
1988 January	11.2	122	1,358	389.2	122	47,649
February	12.5	120	1,497	416.7	124	51,795
March	15.2	122	1,850	548.1	128	70,096
April	10.1	123	1,241	404.6	126	51,143
May	12.9	118	1,518	427.4	126	53,928
June	14.1	120	1,689	427.7	124	52,969
July	12.4	113	1,391	405.0	121	48,809
August	17.4	114	1,991	461.5	119	55,016
September	15.9	120	1,908	469.0	121	56,533
October	14.7	113	1,651	452.1	122	55,186
November	13.8	119	1,646	431.9	123	53,122
December	13.4	120	1,605	459.7	125	57,463
1984.....	165.7	112	18,643	6,759.0	111	749,559
1985.....	158.0	116	18,272	6,165.2	114	702,448
1986.....	155.4	119	18,524	5,635.0	117	659,893
1987.....	156.7	118	18,498	5,199.6	119	618,670
1988.....	163.5	118	19,345	5,293.0	124	653,710

Wool Production and Income

Year	Number Sheep Shorn	Weight Per Fleece	Wool Production	Price Per Pound	Value of Production
	1,000 Head	Pounds	1,000 Pounds	Cents	1,000 Dollars
1984	64	8.6	550	74	407
1985	63	8.5	536	52	279
1986	66	8.1	533	60	320
1987	70	8.9	626	77	482
1988	76	8.7	658	101	665

POULTRY

The poultry industry in Washington has changed in many ways since small farms were developed by homesteaders in the late 1800's. Then, chickens were distributed generally throughout the State on most farms. The leading poultry county in 1912 was King, followed closely by Spokane, Pierce and Whitman. Others of importance were Kitsap, Yakima, Lincoln, Whatcom, and Skagit. Now, the heaviest concentration is in Western Washington.

Small farm flocks have given way to commercial poultry farms which produce either eggs or broilers. The inventory of all chickens, excluding broilers, on December 1 1988, was 6.1 million birds. Hens and pullets of laying age accounted for 4.9 million, down 4 percent from the same date a year ago. Egg production continues a three year increase at 1,327 million eggs for 1988, 2 percent above the previous year.

Broiler production in 1988 was a \$40.9 million enterprise in Washington. Growers produced 129.7 million pounds at 31.5 cents per pound. Both production and price increased.

Inventory on Farms by Class, December 1

Class	1984	1985	1986	1987	1988
1,000 Birds					
Hens and Pullets of Laying Age:					
Hens (1 year and older)	3,286	3,074	2,744	2,160	2,768
Pullets of laying age	2,274	2,190	2,357	2,899	2,106
Total	5,560	5,264	5,101	5,059	4,874
Pullets, 3 months plus	230	590	220	390	609
Pullets, less than 3 months	290	720	352	540	590
Other Chickens	50	50	27	16	12
All Chickens (excluding broilers)	6,130	6,624	5,700	6,005	6,085
Number of Chickens Operations 1/	6,200	6,200	2/	2/	2/

1/ Any place having one or more head on hand at any time during the year.

2/ Estimate discontinued.

Average Number of Layers

Egg Production

Month 1/	1984	1985	1986	1987	1988	1984	1985	1986	1987	1988
1,000 Birds						Million				
December	5,171	5,498	5,166	5,100	5,076	113	118	115	112	115
January	5,106	5,414	5,082	4,994	5,099	109	118	112	109	113
February	5,064	5,409	5,091	4,996	5,071	101	105	96	95	104
March	5,125	5,513	5,143	5,052	5,008	110	122	106	109	113
April	5,139	5,516	5,174	5,033	4,999	109	118	105	109	109
May	5,114	5,373	5,028	5,058	4,967	110	110	108	110	109
June	5,188	5,331	4,853	5,055	4,982	106	106	105	108	107
July	5,184	5,331	4,946	5,061	4,966	107	117	110	116	113
August	5,226	5,251	5,063	5,036	4,941	108	115	112	113	112
September	5,318	5,130	5,023	4,892	4,973	110	108	107	106	110
October	5,270	5,043	5,044	4,880	5,029	113	111	110	108	113
November	5,406	5,140	5,088	5,023	4,992	110	107	109	108	109
Annual Average	5,193	5,329	5,059	5,016	5,008	-	-	-	-	-
State Total	-	-	-	-	-	1,306	1,355	1,295	1,303	1,327

1/ December 1 previous year to November 30.

- - Not applicable.

Chicken Production and Income 1/ 2/

Egg Production and Income 2/

Year	Number Sold	Pounds Sold	Price Per Pound	Value of Sales	Eggs Produced	Price Per Dozen	Value of Production
	1,000 Birds	1,000 Pounds	Cents	1,000 Dollars	Millions	Cents	1,000 Dollars
1984	4,700	15,088	7.0	1,071	1,306	62.3	67,803
1985	3,000	11,700	10.0	1,170	1,355	48.8	55,103
1986	3,400	12,920	8.0	1,034	1,295	51.5	55,577
1987	3,600	13,680	8.0	1,094	1,303	44.4	48,211
1988	3,600	13,320	6.0	799	1,327	50.1	55,402

1/ Excluding broilers.

2/ 12 month period December 1, previous year, through November 30.

Broiler Production and Income

Year	Number Produced	Pounds Produced	Price Per Pound	Gross Income 1/
	1,000 Birds	1,000 Pounds	Cents	1,000 Dollars
1984	21,700	95,480	37.5	35,805
1985	23,000	101,200	32.5	32,890
1986	25,100	112,950	31.0	35,015
1987	26,200	120,520	29.0	34,951
1988	28,200	129,720	31.5	40,862

1/ Includes value of home consumption.

Broiler Commercial Slaughter

Year	Washington			United States		
	Number Slaughtered	Average Liveweight	Certified Pounds 1/	Number Slaughtered	Average Liveweight	Certified Pounds 1/
	1,000 Head	Pounds	1,000 Pounds	1,000 Head	Pounds	1,000 Pounds
1984	20,933	4.39	68,116	4,272,328	4.17	12,998,613
1985	22,586	4.39	73,723	4,439,051	4.19	13,569,794
1986	25,047	4.45	83,248	4,642,784	4.23	14,265,627
1987	26,512	4.62	91,694	4,971,470	4.29	15,502,464
1988	28,062	4.59	96,004	5,158,710	4.30	22,207,755

1/ Ready to cook weight.

MINK

Washington mink rancher's produced 244,000 pelts in 1988, up 11 percent from 1987. Washington ranked 4th nationally with 6 percent of the total U.S. pelt production. Wisconsin, Utah, and Minnesota ranked one, two, and three in order of production. Several color classes are produced in Washington with Standard the most predominant. Gunmetal and Demi-Buff are also popular. These three color classes account for 91 percent of the State's pelt production.

Snohomish County is the top producer of mink pelts in Washington. Kittitas and Pierce Counties were second and third. These three counties produced nearly 71 percent of Washington's 1988 pelt production.

Mink Females Bred by County Pelts Produced by County

County	1987	1988	1989	1987	1988
King	3,400	3,000	3,200	10,400	12,200
Kittitas	10,300	12,400	11,200	48,300	54,600
Pierce	11,900	11,900	10,600	45,300	46,400
Snohomish	19,300	20,400	21,400	69,000	78,700
Thurston	6,000	6,700	6,200	22,300	24,100
Whatcom	5,200	5,400	6,300	18,600	22,400
Other Co. 1/	1,100	1,600	1,600	6,000	5,600
State Total	57,200	61,400	60,500	219,900	244,000

1/ Lewis, Mason, Pacific, Spokane.

Mink Pelts and Females Bred to Produce Kits

Color	Pelts Produced						Females Bred to Produce Kits					
	1983	1984	1985	1986	1987	1988	1984	1985	1986	1987	1988	1989
	1,000						1,000					
Standard	86.7	100.2	109.6	109.2	113.0	123.2	23.9	25.3	25.3	29.3	30.1	30.0
Ranch Wild	12.7	7.1	50.1	5.6	6.1	7.6	2.7	9.4	3.6	1.7	2.2	10.3
Demi-buff	45.5	53.2	18.7	47.2	49.1	46.9	11.5	4.9	11.6	11.7	11.8	2.8
Gunmetal	30.6	30.1	33.5	42.7	43.1	50.9	8.3	9.2	10.9	12.7	14.0	13.2
Mahogany	1/	1/	3.2	3.1	2.5	8.9	1/	1/	.8	.6	1.2	2.2
Pastel	7.2	5.2	5.2	4.9	2.3	3.5	1.4	1.1	1.3	1.1	1.1	1.0
Sapphire	5.5	7.8	3.7	2/	2.2	2.5	1.8	1.9	2/	.8	.7	.7
Violet Type	3.9	5.9	2/	2/	2/	2/	1.2	.4	2/	2/	2/	2/
Other	5.9	7.0	2.0	4.6	1.6	.5	1.2	.3	1.5	.3	.3	.3
Total	198.0	216.5	226.0	217.3	219.9	244.0	52.0	52.5	55.0	57.2	61.4	60.5
Number Of Operations	36	37	45	42	49	46						

1/ Mahogany color not classified

2/ Included in Other.

BEES AND HONEY

Bee colony estimates were started 75 years ago in 1913. The first estimate recorded 51,000 colonies being tended for honey production in Washington. Colony numbers peaked in 1959 with 100,000 colonies. Colonies have declined to 65,000 hives in 1988. There is a growing concern in some segments of the fruit, berry and field crop industry, that there may not be enough bees to pollinate crops for maximum production. Many colonies were lost during 1988 due to mite and disease problems.

Honey sales in Washington for 1988 are valued at \$1.3 million, 26 percent less than the previous year. Prices for the 1988 honey crop averaged 44 cents per pound, unchanged from 1987. Honey prices are based on retail sales by producers and sales made to private processors and co-ops. All government payments and loans made to producers are excluded from the honey prices.

Bees: Number of Colonies, Production, Average Price, and Value

Year	Number Of Colonies	Dec. 15 Stocks 2/	Honey			
			Production		Value	
			Per Colony	Total	Per Pound	Total
	1,000	1,000 Pounds	Pounds	1,000 Pounds	Cents	1,000 Dollars
1976	95	499	25	2,375	46.0	1,093
1977	89	819	46	4,094	53.0	2,170
1978	90	630	35	3,150	54.9	1,729
1979	87	364	33	3,306	54.0	1,785
1980	90	454	42	3,780	57.0	2,155
1981	87	487	35	3,045	57.0	1,736
1982-85 1/	-	-	-	-	-	-
1986	75	360	48	3,600	48.0	1,728
1987	75	206	55	4,125	44.0	1,815
1988	65	306	47	3,055	44.0	1,344

1/ Estimates not made 1982-85.

2/ Stocks in hands of producers.

- Not available.

Livestock County Estimates 1/

County	Cattle and Calves		Cows that have calved			
			Beef		Milk	
	1988	1989	1988	1989	1988	1989
			Head			
WEST						
Clallam	9,000	8,600	2,400	3,000	1,200	1,000
Clark	30,000	33,000	6,600	8,500	7,300	8,500
Cowlitz	9,600	8,000	2,500	3,000	1,800	1,300
Grays Harbor	14,000	17,000	2,700	2,900	5,600	5,600
Island	6,900	7,000	1,000	1,300	2,000	2,200
Jefferson	3,600	3,900	600	900	500	700
King	42,000	37,000	5,500	3,800	17,700	17,000
Kitsap	2,000	1,900	500	900	2/	2/
Lewis	42,700	42,000	8,500	9,500	12,000	11,600
Mason	2,400	1,600	500	600	200	200
Pacific	10,000	9,000	4,000	3,500	2,300	1,900
Pierce	32,000	29,000	5,000	4,400	12,400	12,100
San Juan	1,700	2,400	600	1,200	2/	2/
Skagit	44,500	43,000	3,800	3,700	16,500	18,700
Skamania	600	1,000	300	300	2/	2/
Snohomish	50,000	50,000	5,700	5,400	21,200	22,400
Thurston	26,500	21,700	5,300	4,500	8,000	7,000
Wahkiakum	5,500	6,900	800	1,800	2,000	1,800
Whatcom	109,000	110,000	9,500	6,300	52,600	54,400
Total	442,000	433,000	65,800	65,500	163,300	166,400
CENTRAL						
Benton	33,700	32,000	13,000	15,000	2,000	1,000
Chelan	4,400	3,000	2,700	1,500	2/	2/
Kittitas	62,000	55,000	24,800	20,000	900	1,000
Klickitat	24,400	30,000	10,300	15,500	1,200	1,000
Okanogan	44,500	50,000	26,000	33,000	300	200
Yakima	167,000	183,000	37,400	28,000	19,800	24,500
Total	336,000	353,000	114,200	113,000	24,200	27,700
NORTHEAST						
Ferry	10,900	16,500	4,600	10,500	2/	2/
Pend Oreille	6,600	6,500	2,300	3,500	300	300
Spokane	42,200	30,000	15,000	12,500	5,200	3,600
Stevens	37,300	36,000	11,100	15,000	3,200	3,700
Total	97,000	89,000	33,000	41,500	8,700	7,600
EAST CENTRAL						
Adams	70,000	94,000	24,000	21,000	3,000	2,000
Douglas	16,500	18,000	5,000	8,500	100	100
Franklin	74,000	64,000	30,000	20,000	2,500	2,800
Grant	104,000	105,000	27,000	27,000	6,700	7,400
Lincoln	44,500	40,000	22,500	24,000	300	200
Total	309,000	321,000	108,500	100,500	12,600	12,500
SOUTHEAST						
Asotin	8,200	10,200	3,800	4,600	2/	2/
Columbia	6,800	6,600	2,700	2,900	2/	2/
Garfield	13,400	12,200	6,000	6,500	2/	2/
Walla Walla	47,200	44,000	11,000	7,000	1,300	1,100
Whitman	30,400	31,000	14,000	17,500	500	300
Total	106,000	104,000	37,500	38,500	1,800	1,400
Other Counties	-	-	-	-	400	400
State Total	1,290,000	1,300,000	359,000	359,000	211,000	216,000

Livestock County Estimates 1/(Continued)

County	Sheep and Lambs		Hogs and Pigs		Broiler Production	
	1988	1989	1987	1988	1987	1988
West			Head			
Clallam	1,500	1,700	250	300	-	-
Clark	2,000	1,800	600	900	1,990,000	2,023,000
Cowlitz	850	700	100	200	1,755,000	1,837,000
Grays Harbor	450	300	200	150	130,000	276,000
Island	350	300	150	150	-	-
Jefferson	150	100	100	50	-	-
King	1,300	1,400	800	1,300	1,835,000	1,818,000
Kitsap	1,200	800	500	300	-	-
Lewis	2,400	2,500	300	500	4,927,000	5,223,000
Mason	200	200	100	100	-	-
Pacific	200	200	150	200	-	-
Pierce	800	1,100	400	1,000	3,642,000	2,972,000
San Juan	1,700	1,700	50	50	-	-
Skagit	600	600	100	400	550,000	600,000
Skamania	300	200	50	50	-	-
Snohomish	1,900	1,900	500	600	4,665,000	3,872,000
Thurston	1,100	1,200	400	700	3,300,000	3,714,000
Wahkiakum	200	800	50	50	-	-
Whatcom	600	500	500	1,500	2,410,000	2,584,000
Total	17,800	18,000	5,300	8,500	25,204,000	24,919,000
Central						
Benton	2,800	2,000	1,900	1,400	-	-
Chelan	400	300	300	300	-	-
Kittitas	6,000	4,700	2,200	1,200	-	-
Klickitat	3,000	3,000	800	600	-	-
Okanogan	2,500	4,900	1,400	1,000	-	-
Yakima	21,900	21,900	2,200	1,900	576,000	2,974,000
Total	36,600	36,800	8,800	6,400	576,000	2,974,000
Northeast						
Ferry	500	400	200	100	-	-
Pend Oreille	300	200	400	200	-	-
Spokane	2,500	3,700	3,400	4,300	-	-
Stevens	1,700	1,600	3,500	3,600	-	-
Total	5,000	5,900	7,500	8,200	-	-
East Central						
Adams	1,000	900	1,500	3,500	-	-
Douglas	500	400	400	800	-	-
Franklin	2,300	3,400	3,400	2,200	-	-
Grant	3,200	3,700	6,500	7,100	-	-
Lincoln	1,500	1,300	2,000	1,400	-	-
Total	8,500	9,700	13,800	15,000	-	-
Southeast						
Asotin	350	200	400	400	-	-
Columbia	300	200	1,200	1,000	-	-
Garfield	450	200	900	700	-	-
Walla Walla	1,000	1,000	1,100	1,800	-	-
Whitman	2,000	2,000	16,000	11,000	-	-
Total	4,100	3,600	19,600	14,900	-	-
Other Counties	-	-	-	-	420,000	307,000
State Total	72,000	74,000	55,000	53,000	26,200,000	28,200,000

1/ Cattle and sheep inventories, January 1. Hog inventory, December 1.
Broiler production, December 1 - November 30.

2/ Included in Other Counties.

- Not applicable.

AQUACULTURE

Aquaculture, the cultivation of sea animals and plants in controlled marine environments, is a rapidly expanding enterprise within the Washington fishing industry. Aquaculture in our state consists mainly of fish, clam and oyster production.

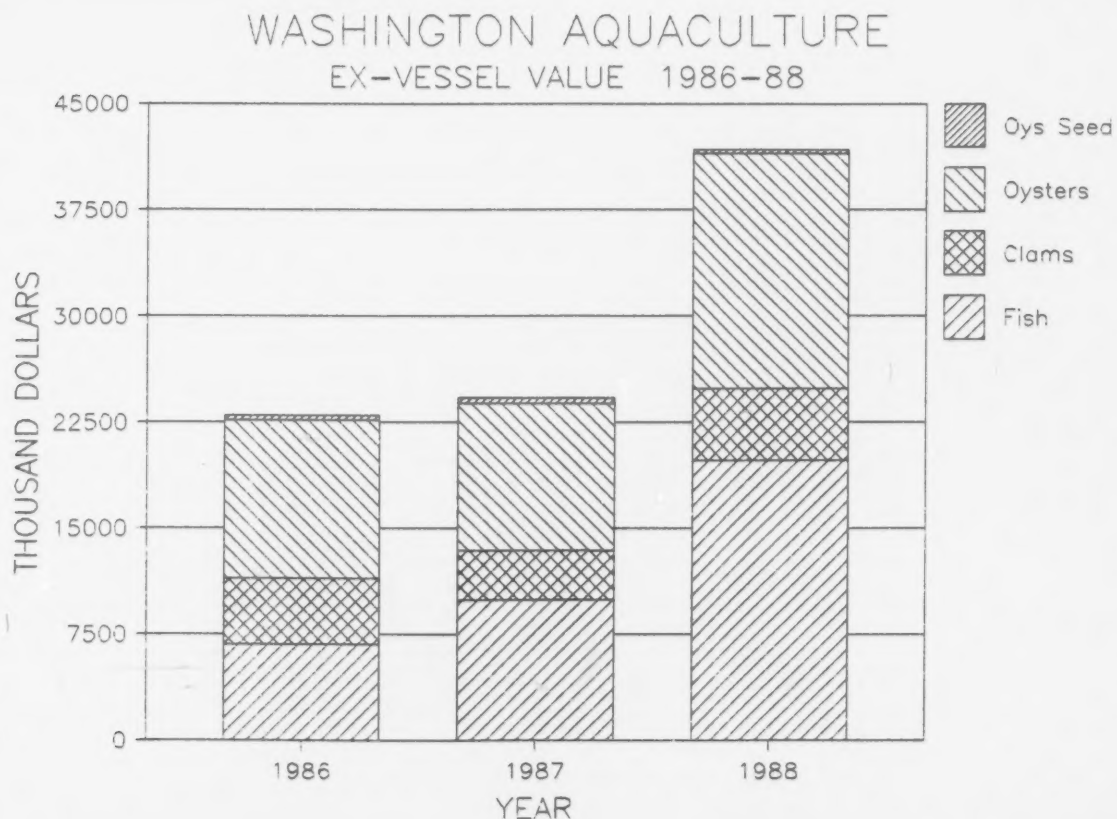
Aquaculture in Washington produced over \$41 million during 1988. These data are preliminary levels provided by the Department of Fisheries for the State of Washington. The 1988 value at \$41.8 million is 72 percent higher than 1987 and 84 percent higher than 1986.

The total quantity of fish and shellfish produced during 1988 was 19.8 million pounds, 9 percent more than 1987. Each of the general categories of fish, clams, and oysters show increases in value that range from nearly double for fish to an increase of 46 percent for clams.

The combined quantities for the three separate groups does not show increases as sharp as the value. The quantity of fish at nearly 6 million pounds is 47 percent more than 1987. The largest contributor in this category is the market size Atlantic salmon, accounting for nearly 6 million pounds valued at \$9.6 million.

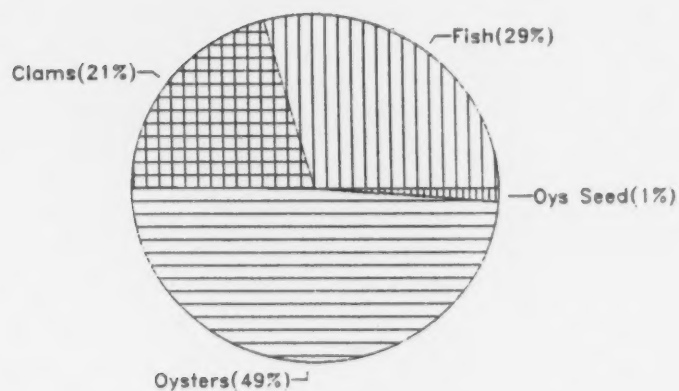
The production of all clams was 4.8 million pounds valued at \$5 million. Manilla clams are the dominate species at 3.3 million pounds and \$3.8 million. The value of the Manillas was 54 percent more than 1987, while the poundage posted a 6 percent gain.

Production of all oysters was 9 million pounds, a decrease of 4 percent from the previous year. However, the value of all oysters was \$16.6 million, an increase of 59 percent from 1987. The Pacific oyster dominates this segment of the industry in both quantity and value.

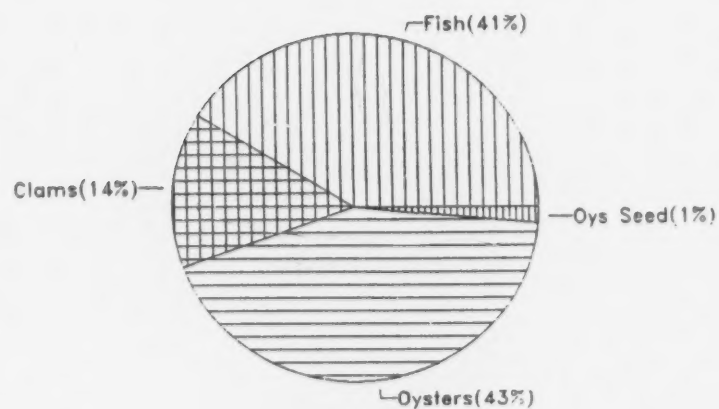


Aquaculture Production, Washington

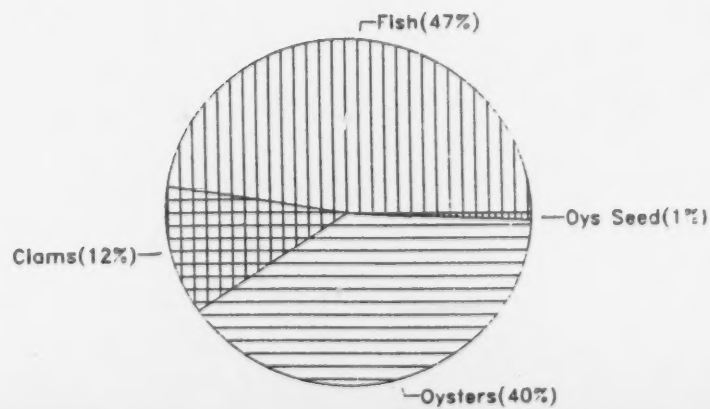
Value of Production 1986



Value of Production 1987



Value of Production 1988



Aquaculture Production, Washington, 1986-88

Species	Quantity			Ex-Vessel Value 2/		
	1986	1987	1988	1986	1987	1988
Fish	Pounds			Dollars		
Salmon 1/						
Market	2,532,367	3,362,354	3,554,214	3,738,323	5,001,141	5,690,008
Juvenile	N/A	6,198	378	N/A	25,442	1,682
Egg	15,769	10,537	19,450	434,867	311,740	678,200
Trout						
Market	327,391	259,532	277,975	593,301	554,638	522,357
Juvenile	63,211	74,180	46,616	140,918	194,370	243,302
Egg	49,814	61,402	70,475	1,506,712	1,889,412	2,577,100
Atlantic Salmon						
Market	17,811	248,223	1,976,540	67,413	1,175,984	9,614,812
Juvenile	7,542	28,008	18,798	265,444	553,355	313,681
Egg	N/A	1,612	975	N/A	263,271	200,360
Total Market	2,877,569	3,870,109	5,808,729	4,399,037	6,731,763	15,827,177
Total Juvenile	70,753	108,386	65,792	406,362	773,167	558,665
Total Egg	65,583	73,551	90,900	1,941,579	2,464,423	3,455,660
Total Fish	3,013,905	4,052,046	5,965,421	6,746,978	9,969,353	19,841,502
Clams						
Butter	70,370	14,096	8,959	12,007	5,880	3,605
Cockles	N/A	1,632	2,450	N/A	346	522
Geoducks	N/A	2,494	N/A	N/A	3,232	N/A
Horse	77,910	21,648	6,575	6,193	6,874	1,823
Littleneck	926,493	994,985	802,027	754,143	541,463	561,219
Manilla	3,696,211	3,159,187	3,364,439	3,459,931	2,472,100	3,816,153
Mud	N/A	N/A	536	N/A	N/A	670
Mussels	297,313	284,684	486,146	349,412	343,306	622,126
Softshell	422,846	191,780	139,603	140,356	102,063	66,046
Manila Clam Seed	N/A	N/A	N/A	N/A	50	2,600
Scallops	N/A	268	307	N/A	933	936
Total Clams	5,491,143	4,670,774	4,811,042	4,722,042	3,476,247	5,075,700
Oysters						
Eastern	N/A	N/A	175	N/A	N/A	2,114
Olympia	7,457	7,125	39,498	167,364	109,780	1,337,694
Pacific	8,638,877	9,352,384	8,920,424	10,993,283	10,253,870	13,392,957
Kumamoto	N/A	N/A	89	N/A	N/A	1,608
Edulis	5,412	N/A	37,961	52,033	N/A	1,842,216
Other	N/A	9,342	N/A	N/A	56,225	N/A
Total Oysters	8,651,746	9,368,851	8,998,147	11,212,680	10,419,875	16,576,589
Oyster Seed (Bags)	(28,655)	(28,329)	(32,278)	301,922	363,291	284,000
Nori	N/A	35	6,289	N/A	310	N/A
Total Production 3/	17,156,794	18,091,706	19,774,461	22,983,622	24,229,076	41,777,791

1/ Chinook and Coho.

2/ Ex-vessel value is the value of revenue received by fishermen/harvesters.

3/ Total production quantity does not include oyster seed.

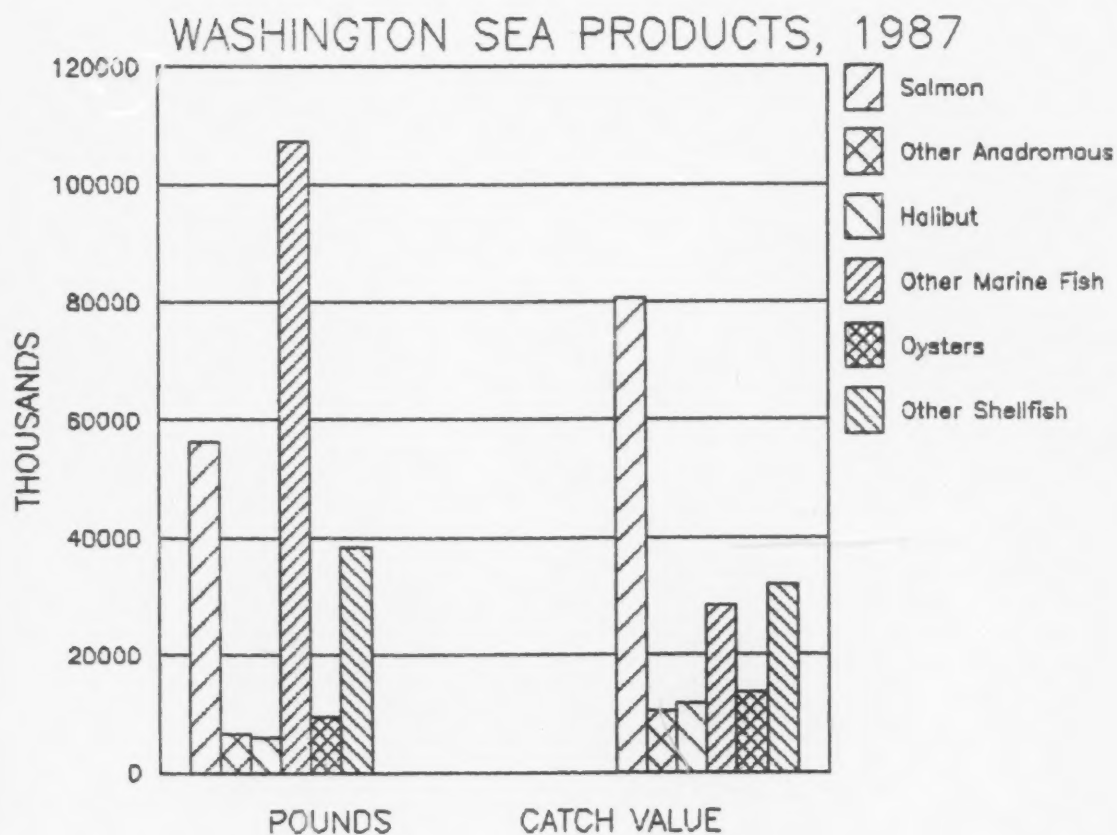
N/A - Not available.

Source: Department of Fisheries, State of Washington

Washington Sea Products, 1985-87

Species	Weight			Catch Value		
	1985	1986	1987	1985	1986	1987
	1,000 Pounds			\$1,000		
Salmon	65,885	49,660	56,446	50,598	54,513	80,804
Other Anadromous	6,348	7,399	6,603	8,236	7,723	10,589
Halibut	5,700	6,468	5,942	7,268	11,849	11,700
Other Marine Fish	102,799	95,507	107,369	21,454	22,576	28,473
Oysters	6,023	8,711	9,456	6,756	11,270	13,513
Other Shellfish	23,661	34,771	38,498	13,709	24,493	31,871
Total	210,416	202,516	224,314	108,021	132,424	176,950

Source: Department of Fisheries, State of Washington



Washington Agricultural Statistics Service

Current estimates of the data published in this bulletin are available throughout the year. The following table identifies the types of estimates made for each commodity by month. The current estimates are published in a monthly publication "Agri-Facts". The annual subscription fee for "Agri-Facts" is \$10 per year. Reporters for our surveys receive reports free of charge.

Washington Agricultural Statistics Service Reports

Commodity	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
A = Acreage, P = Production, X = Estimates Released, PU = Production and Utilization, PDI = Production, Disposition, and Income, S = Stocks.												
Winter Wheat.....	A,P				A,P	P	A,P	P	A,P			
Spring Wheat.....	A,P		A					P	P			
Barley.....	A,P		A				A,P	P	P			
Oats.....	A,P		A				A			A,P		
Field Corn.....			A				A					
For Grain.....	A,P							P				
For Silage.....	A,P											
Dry Edible Beans.....	A,P		A				A	P	P	P	P	
Dry Peas and Lentils.....	A,P									A,P		
Potatoes.....	S	S	S	S	S		A		PU		P	A,P
Hops.....	A,P		S				A	P	S			
Hay.....	A,P,S		A		S		A	P		P		
Mint.....	A,P											
Grain Stocks.....			S			S			S			S
Apples.....	PU						P,PU	P		P		
Apricots.....	PU					P	P					
Cherries, Sweet.....	PU					P	P					
Grapes.....	PU						PU	P	P	P		
Peaches.....	PU					P	P	P				
Pears, Bartlett.....	PU					P	P	P	P			
Pears, Other.....	PU						P,PU	P	P			
Prunes.....	PU							P	P	P		
Cranberries.....	A,P							P				
Strawberries.....	A,P			A		P			A,P			
Onions: Storage.....	A,P		A				A		P	P		
Non-Storage.....	A,P		A		A		P	P				
Vegetables.....	A,P		A			A,P	A,P	P	P			
Cattle on Feed.....	X			X			X			X		
Cattle Inventory & Calf Crop.....	X			PDI								
Milk Production.....	X	X	X	X	X	X	X	X	X	X	X	X
Manufactured Dairy Products.....	X	X	X	X	X	X	X	X	X	X	X	X
Sheep Inventory & Lamb Crop.....	X			PDI								
Wool Production.....			X									
Hog Inventory & Pig Crop.....				PDI								X
Livestock Slaughter.....	X	X	X	X	X	X	X	X	X	X	X	X
Egg Production.....	X	X	X	X	X	X	X	X	X	X	X	X
Hatchery and Broilers.....				PDI								
Bees and Honey.....	X											
Mink.....							X					

